

EXHIBIT 61

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United States
Environmental Protection
Agency

Region 10
1200 Sixth Avenue
Seattle WA 98101

Water

July 1979

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Environmental Final Impact Statement

City of Spokane Combined Sewer Overflow Abatement Project

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FINAL ENVIRONMENTAL IMPACT STATEMENT

City of Spokane, Washington
Combined Sewer Overflow
Abatement Project

Prepared By:

U. S. Environmental Protection Agency
Region X
Seattle, Washington

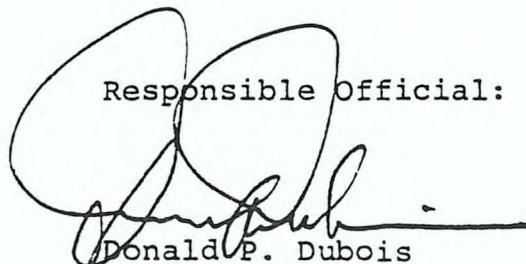
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Responsible Official:



Donald P. Dubois
Regional Administrator

AUG 1 1979

Date

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SUMMARY

FINAL ENVIRONMENTAL STATEMENT -- CITY OF SPOKANE
COMBINED SEWER OVERFLOW ABATEMENT PROJECT

Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle, Washington 98101

1. Type of Statement: Draft () Final (x)
2. Type of Action: Administrative (x) Legislative ()
3. Description of the Action:

The waste water conveyance system of the City of Spokane currently discharges untreated sewage to the Spokane River with almost every rainfall or snowmelt. This happens because the city conveyance and collection system carries both raw sewage and stormwater, and the pipes in the system are too small to carry the entire flow of sewage and stormwater to the sewage treatment plant. To relieve the flooding problems which would be caused by pipes overflowing during such conditions, the combined sewage and stormwater or melt-water is discharged directly to the Spokane River with no treatment. Such occurrences are commonly referred to as a Combined Sewer Overflow or CSO. Currently in Spokane during a rainstorm which would cause a CSO to occur, some of the flow in the conveyance system is treated by the City's advanced waste treatment plant, some is discharged as a CSO directly to the river prior to reaching any type of treatment facility. The system overflows directly into the river at more than 30 points throughout the city. CSO's contain raw sewage and therefore can cause public health hazards and other water pollution and aesthetic problems. The goal of the city's proposal is to remove the stormwater from the sewage collection system so that the sewage conveyance system will not overflow and discharge untreated sewage to the Spokane River.

On March 5, 1979, the Environmental Protection Agency (EPA) released a draft Environmental Impact Statement (EIS) on the city's facility plan proposal to control and abate CSO's. All of the alternatives in the city's facility plan plus several others from outside sources were evaluated in

the draft EIS. A number of public meetings were held during the preparation of the draft EIS and public hearings were held on April 19, 1979 although the agency accepted comments after that date. Comments and EPA's responses to these comments are included in this final EIS.

4. The preferred Alternative:

The preferred alternative is Alternative 3, construction of a separate stormwater conveyance system. This would separate stormwater from sewage; the sewage would continue to be conveyed to the city's waste treatment plant but would no longer enter the river untreated. The stormwater would receive no treatment prior to discharge to the river.

To facilitate planning and funding of this alternative, the proposed plan has been divided into two phases. Phase I would commence this year and would involve eventual construction of a storm sewer system in the two drainage basins which contribute the largest of the city's CSO's. Phase II, separation of stormwater and sewage flows in other areas of the city, would not commence until Phase I has been completed and the results evaluated. Future city and county facility planning would also be necessary prior to detailed design of Phase II. EPA will provide 75% and the State 15% of the grant eligible costs in Phase I. The city will provide the remaining needed Phase I funds.

The major impacts of Phase I include construction of about 120 miles of pipeline and removal of an estimated 84% of the current annual volume of CSO to the Spokane River. Disruption of traffic patterns could be a significant impact during construction, however the city is committed to carrying out construction in a manner to minimize such impacts. The actual plans for such mitigation will be developed during the design stage of this project. Removal of raw sewage from the flows directly entering the river should reduce harmful pathogenic material in the Spokane River and should improve the aesthetical enjoyment of the river. The state will require monitoring to determine the effectiveness of Phase I and, with the city, will develop a schedule for future phases of the project.

Removal of storm water from the treatment plant in Phase I and II would allow the city to treat more sewage than it could otherwise treat. This could allow the regionalization of the plant. Use of the City of Spokane facility as a regional facility will be evaluated at the appropriate state and local levels. Decisions concerning timing and manner of regionalization require more detailed design information than is currently available. Information refined and developed during design of Phase I will be used in the regionalization evaluation.

5. Additional Alternatives Considered:

A variety of approaches which could control and abate the CSO problem were evaluated for varying degrees of control of CSO's. Some of these alternatives were originally evaluated by the city in their facility plan while others were proposed later by private citizens.

The storage basin concepts (Alternative 1, the Klicker Plan and several of the combination alternatives) would still allow CSO's to occur, although not as frequently as present. The storage basins would retain some of the combined stormwater and sewage instead of directly discharging to the river. The combined stormwater and sewage in the storage basins would be gradually released back into the existing conveyance system for eventual treatment at the city's facility. As a result, neither the conveyance system nor the plant would have the capacity to function as a regional facility. In addition, the treatment of a relatively dilute influent at a phosphorous removal facility is an inefficient use of that facility.

Another approach investigated by the city was small satellite treatment plants located throughout the city. CSO's would receive primary treatment and chlorination at the satellite facilities and would be discharged directly to the river. Primary treatment of sewage would likely cause water quality violations. The effectiveness of chlorination under these circumstances is unknown. At the larger overflow points, it could be extremely difficult to adequately disinfect the large volumes of water that would have to be treated in high runoff situations. Proper mixing and contact time may not be available in the small satellite facilities. Also, the capital and operation and maintenance costs are considerably higher than with some of the other options.

A complete wastewater and stormwater export plan, the Latenser plan, was considered. The system would have potentially significant environmental impacts on the receiving stream and would violate state water quality guidelines and policy. This plan is also the most costly of the alternatives. Impacts on the receiving water would include changing an intermittent stream to a perennial stream, possible contamination of ground water, possible contamination of drinking water supplies and possible adverse impacts on the downstream fisheries.

6. List of Agencies and Individuals that commented on the Draft EIS:

Written Comments

Federal

U. S. Department of Agriculture, Soil Conservation Service
U. S. Department of Army, Corps of Engineers
U. S. Department of Housing and Urban Development
U. S. Department of the Interior, Office of the Secretary
U. S. Department of Transportation, Coast Guard
Advisory Council on Historic Preservation

State

Washington Department of Ecology
Washington Department of Fisheries
Washington Department of Game
Washington Office of Archeology and Historic Preservation
Washington Office of Financial Management
Washington State Parks and Recreation Commission

Local

Spokane Regional Planning Conference
Spokane County Engineers
Spokane County Health District
Spokane City Finance Department
Spokane City Public Works Department
Spokane City Plan Commission
Spokane City Public Utilities
Spokane City Traffic Engineering Department

Individuals

Bovay Engineers
Jake Klicker

Oral Comments

Roger James - Spokane City Public Utilities
James Schasre - Lake Spokane Environmental Association
Robert Smith - Bovay Engineers

7. List of Preparers of the Final EIS:

Jones and Stokes Associates, Inc.
Dr. Charles Hazel
Michael Rushton

Culp/Wesner/Culp
Dr. Robert Gumerman, P.E.

8. The following agencies and individuals were sent
copies of the final EIS:

FEDERAL AGENCIES

U. S. Department of Defense
U. S. Department of Housing & Urban Development
U. S. Department of Agriculture
U. S. Department of the Interior
U. S. Department of Health, Education, and Welfare
U. S. Department of Transportation
National Oceanic & Atmospheric Administration
Advisory Council on Historic Preservation

STATE AGENCIES

State of Washington Department of Fisheries
State of Washington Department of Game
State of Washington Office of Archaeological and Historical
Preservation
State of Washington Department of Ecology
State of Washington Office of Financial Management
Washington State Parks & Recreation Commission

LOCAL AGENCIES

Spokane County Engineering Office
Spokane County Health District
Spokane County Planning Commission
Spokane Traffic Engineering Office
Spokane Planning, Programming, and Community
Development Department
Spokane Regional Planning Conference
Mayor of Spokane
Spokane City Manager
Spokane City Engineer

INDIVIDUALS AND OTHER GROUPS

Spokane Daily Chronical
Gonzaga Environmental Law Caucus

League of Women Voters
Bovay Engineers
Spokane Public Library
We the People
Spokesman Review
National Wildlife Federation
Washington Archaeological Research
Dan Neal
James A. Schasre
Carl Maxey
Bob Eisenbart
Ray Aoltero
Jake Klicker
Larry Esvelt
William Dunmire

Chapter 1

INTRODUCTION

History and Purpose of Proposed Project

The City of Spokane has applied to the State of Washington and the federal government for grant funds to design and construct improvements to its wastewater system. The city recently constructed a new advanced waste treatment plant on the Spokane River, but its combined sanitary and stormwater collection system is not sufficiently sized to convey peak wastewater and storm flows to the plant. As a result, untreated combined sewer overflows (CSOs) are discharged to the Spokane River 80 to 110 times a year. The continuation of CSOs is contrary to requirements of the city's National Pollutant Discharge Elimination System (NPDES) permit, and creates a public health threat to persons using the river. The Washington Department of Ecology (DOE) which administers NPDES permits, has ordered Spokane to eliminate CSOs. The grant funds, made available through the Federal Water Pollution Control Act (FWPCA, PL 92-500) and its successor, the Clean Water Act of 1977 (PL 95-217), are being sought to design and construct wastewater system improvements capable of bringing the city into compliance with its NPDES permit and relieving the public health threat.

Spokane initiated action in this regard by preparing a facilities plan for wastewater system improvements. This planning effort, completed in 1977, was funded in part by state and federal grants. In order to comply with the mandates of the National Environmental Policy Act (NEPA), the U. S. Environmental Protection Agency (EPA) was required to prepare an environmental impact statement (EIS) on the project before allocating grant monies to project design and construction. The EIS was begun in May 1978 and the Draft EIS was distributed for public review in January 1979. Two public hearings on the draft were subsequently held in Spokane on April 4, 1979. The EIS evaluated the project proposed by the city and a variety of alternatives developed in the planning process.

Purpose and Content of the Final EIS

This Final EIS has been prepared to respond to comments and discuss environmental issues raised with regard to the Draft EIS, as required by NEPA and its implementing guidelines.

Recent changes to the Council on Environmental Quality (CEQ) guidelines for preparing EISs allow the Final EIS to take several forms. The Draft EIS can be revised in its entirety to reflect project changes and/or public comment, or a supplemental document may be prepared that includes only comments, responses to comments and changes in the Draft EIS. Because it is felt that comment on the Spokane CSO Draft EIS did not raise substantive new issues or create major changes in the approach to solving the CSO problem, this Final EIS has been prepared as a supplement to the Draft EIS.

This introduction is followed by a summary of the proposed action and a number of issue-oriented statements that respond to comments on the project's major environmental impacts. A separate section responds to specific comments that could not be readily categorized into general topics. All letters of comment are included and transcripts of the public hearings are attached at the back of the report.

Copies of the full Draft EIS may be obtained by: writing to Mr. Roger Mochnick, U. S. Environmental Protection Agency, Region X, 1200 Sixth Avenue, Seattle, Washington 98101; or contacting Mr. Dan Robison, Director of Environmental Programs City Hall, Room 303, Spokane Washington 99201. Copies of the report are also on file at the main branch of the Spokane City Library, West 906 Main in Spokane.

Chapter 2

SUMMARY OF PROPOSED ACTION

Sewer Separation

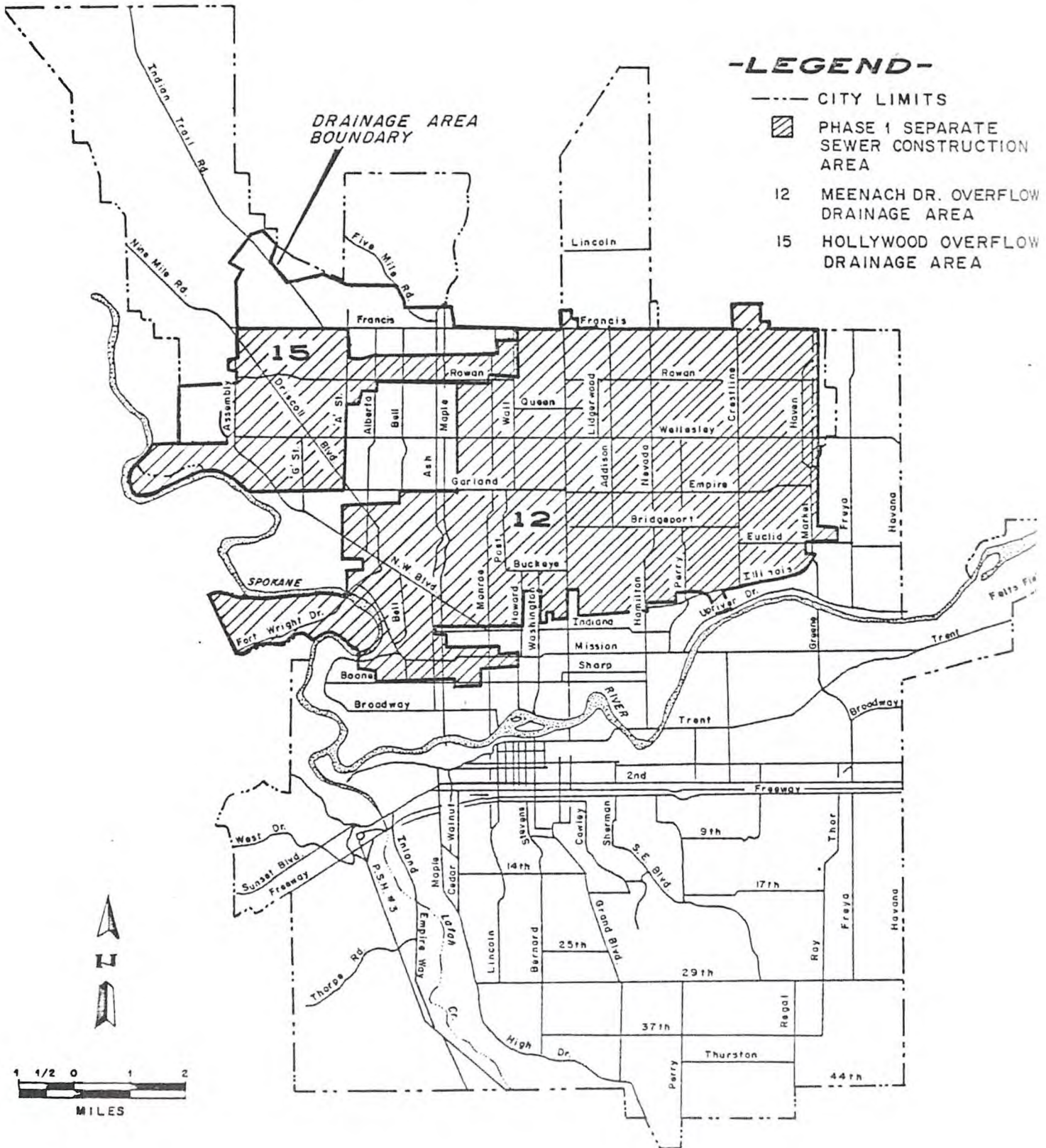
The proposed project to abate the sewer overflow problem is to construct new storm sewer lines throughout the city. These new lines will separate storm runoff from sanitary sewerage and thereby reduce the hydraulic overloading of existing lines. After construction, stormwater will flow directly to the river rather than through the wastewater treatment plant, and mainly sanitary sewage will flow through the treatment plant.

The construction is expected to occur in two phases. Phase 1 will include about 120 miles of pipeline construction in the northern one-third of the city (see Figure 2-1). This will eliminate the two largest CSOs, at Meenach Drive and Hollywood. The city estimates about 84 percent of the current annual CSO in Spokane comes from these two overflow points. It will take about 5 years to complete Phase 1 construction. The remaining 100 miles of new pipe will be installed in following years. The exact time frame and location of subsequent construction has not been established; the Phase 2 project will be reevaluated after the Phase 1 improvements are completed and evaluated. At the appropriate time, the Phase 2 project will receive additional engineering, economic and environmental analysis as part of the planning process. DOE will reevaluate the entire CSO project in terms of continued commitment of federal and state funds at the completion of Phase 1 (see their letter of comment in Chapter 4).

Project Timing and Funding

The sewer separation project has been divided into two phases because funding is not immediately available for the entire effort. This initial planning effort has sought to remedy the public health threat created by overflows and at the same time assess the Spokane treatment plant's ability to function as a regional wastewater facility. Phase 1 of the proposed action should result in an improvement in wastewater contamination of the Spokane River, and at the same time it starts the process of separating storm flows from the sanitary wastewater conveyance and treatment system. This will eventually free capacity in the system for transport and treatment of additional wastewater sources.

PROPOSED ACTION - PHASE 1



SOURCE: BASEMAP
MODIFIED FROM SPOKANE CITY DEPARTMENT
OF PUBLIC WORKS, 1977, EXHIBITS

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Step I of the construction grants process consists of facilities planning. In this project, the facilities planning process considered the scope and nature of the CSO problem, a variety of approaches which could be used for relieving this problem, and the manner in which EPA could participate. The proposed action is the approach judged to be the most suitable for this project. The magnitude and extent of the CSOs were estimated by the city in their facilities plan. These figures will be reevaluated as detailed design begins. Any decision concerning the scope of Phase 2 and any final decisions on regionalization of treatment for areas not currently served by the city system will be subject to that reevaluation. Step II in the process of implementation will be design of the facilities. According to the state priority list, grant funds are available for this in fiscal year 1979. Funds for Step III, actual construction of facilities, will be available in fiscal years 1980 through 1983.

The Draft EIS provided a relatively detailed explanation of how Phase 1 costs were developed and allocated to federal, state and local entities. The allocation of Phases 1 and 2 costs between the EPA, the state and the city was based on EPA rules for funding of multipurpose projects, which are defined as projects which solve more than just a water quality problem. In the City of Spokane project, the storm sewers would, in addition to solving the CSO problem, also solve local sewer backup problems, drainage problems, and allow regionalization of sewage treatment and disposal. Based upon the allocation rules for multipurpose projects, the Draft EIS presented a possible allocation of Phase 1 and Phase 2 costs between EPA, the State of Washington, and the City of Spokane. This allocation is presented in the following table.

SUMMARY OF CONSTRUCTION COST SHARING*-PROPOSED ACTION

	<u>Total Construction Cost</u>	<u>EPA</u>	<u>State of Washington</u>	<u>City of Spokane</u>
Phase 1	\$24,980,000	\$18,740,000	\$3,750,000	\$2,490,000
Phase 2	39,070,000	23,430,000	4,680,000	10,960,000
Total	\$64,050,000	\$42,170,000	\$8,430,000	\$13,450,000

*Allocations for Phase 1 were made assuming 75 percent federal funding, 15 percent state funding and 10 percent local funding because this first phase was determined to be 100 percent eligible for grant funding. The entire project was determined to be 87.8 percent grant fundable; this accounts for the less than 75 percent federal participation in Phase 2. It is important to note that Phase 2 sharing is only speculative at this time because grant fund availability and priority for grant money distribution is not known more than 1 year in advance.

The timing and funding for Phase 2 has not been developed in detail because the availability of federal and state grant money cannot be determined far enough in advance. It is estimated that Phase 1 construction will not be complete for approximately 5 years, and grant allocations are not established for more than 2 to 3 years in advance. Therefore, a specific time frame and cost allocation cannot be predicted at this time. In the interim, the effectiveness of Phase 1 construction can be monitored and more planning can be conducted to clarify the effect of subsequent sewer separation on interceptor and treatment plant capacity. Proposed regional 201 planning can also further explore the timing and extent of tying unsewered county areas into the city wastewater system.

Relationship of Proposed Action to Spokane's NPDES Permit Requirements

The Washington DOE, which has issued and is responsible for enforcing the city's waste discharge permit, has agreed that sewer separation "is the most desirable option for abating the problem of combined sewer overflows in Spokane" (see their letter of comment on the EIS in Chapter 4). Also, they remain committed to ensuring that all CSOs are eliminated regardless of the availability of federal and state grants. However, they are not committed to funding Phase 2 of the separation at this time because of the uncertainty of grant money in the future. The DOE indicates in their comments on the Draft EIS that a schedule for sewer separation must be developed. This schedule would become a part of the city's NPDES permit.

Mitigation of Proposed Action Impacts

Many of the proposed project's potential impacts can be reduced or eliminated by some mitigative action. Efforts should be made by the city to minimize short-term construction problems by adopting some of the following construction practices; fugitive dust should be controlled by watering disturbed surfaces, especially during windy periods; excavation, pipe-laying and backfilling should occur in a continuous sequence, avoiding long, open ditches and exposed spoil piles; excavation along or across major traffic corridors should be planned well in advance with the city traffic department and police so that lane closures and blocking of access do not result in major traffic congestion or create unnecessary safety hazards; citizens should be notified prior to any utility disruptions (gas, electricity, water) that might be necessary; construction in the city's main commercial areas should be scheduled to avoid peak business periods (e.g., major holidays) whenever possible.

Once a system of separate storm sewers is in operation, stormwater runoff will be flowing directly to the Spokane River without treatment. This will reduce hydraulic overloading of the treatment plant and avoid costly treatment of nonsanitary flows, but this runoff will contain a variety of materials washed from yards, streets, and various paved areas. There are a variety of measures which could be taken by the city to help reduce the introduction of these types of materials. This includes more frequent street cleaning, dry weather flushing of catch basins, improved litter control, screening of storm outfall points, diversion of runoff for percolation and recharge, use of porous asphalt in new construction areas, improved control over used oil disposal, and investigation of alternative deicing methods. EPA encourages the city to consider such measures since presently there are no treatment requirements for stormwater runoff. However, it is possible that federal treatment requirements may be established at some future date. This may include issuance of a general NPDES permit for stormwater discharges and required implementation of certain Best Management Practices (BMPs). Currently EPA and DOE encourage voluntary adoption of control practices.

Chapter 3

GENERAL RESPONSES TO COMMENTS

Introduction

The following pages restate and/or augment discussions of major environmental issues presented in the Draft EIS. The material has been kept as brief as possible while responding to some of the more prevalent questions raised on the Draft EIS. Only those issues stimulating significant comment or requiring additional clarification are included. Individual comments requiring less response are included in the following chapter.

Wastewater Regionalization at the Spokane Treatment Plant

It was intended that this EIS on Spokane's CSO abatement plans would evaluate the technical and economic feasibility of using the Spokane treatment plant as a regional wastewater treatment facility. Each of the CSO control alternatives was analyzed in this regard. It was not intended that the precise timing of regionalization would be determined, nor would it be decided which outlying areas might be first connected to the plant. An analysis of data presented in the city's CSO facilities plan (Spokane City Department of Public Works, 1977) and information obtained from other wastewater planning documents (U. S. Department of Army, Corps of Engineers, 1976; Kennedy Engineers, Inc., 1978 and 1978a; Esvelt and Saxton-Bovay Engineers, Inc., 1972; Bovay Engineers, Inc., 1973 and 1977) suggest that the city's plan to construct separate storm sewers would eventually eliminate all CSOs, remedy local sewer backup and flooding, and free capacity in the city interceptor and treatment plant for service to presently unsewered areas. The other alternatives considered would reduce or eliminate CSOs but would not be as effective at reducing stormwater flows in the city's interceptor system. Therefore, they would not be as amenable to future regionalization schemes as the proposed project.

Separate sewers constructed in the Hollywood and Meenach drainage areas during Phase 1 will remove stormwater from the existing sanitary sewer system. Should treatment capacity become available as a result of Phase 1, regionalization possibilities could be explored at the appropriate state and local government levels. Before any such available capacity can be used to service new areas, DOE requires that a schedule for complete separation be developed (see DOE letter in Chapter 4). At that time it would be possible to contemplate regionalization but an expansion of the service area would involve several important trade-offs. Even though there may be sufficient dry weather capacity in both the interceptors and the treatment plant, during storm conditions (80-100 days per year) there would continue to be insufficient capacity in the secondary treatment and phosphorus removal facilities during most storms. As an example, if sewer separation reduced stormwater flows by 7-8 mgd and a new service area expansion took on 3-4 mgd of sanitary flows, there would only be a net reduction of 3-4 mgd in water diverted through the stormwater treatment system. Therefore, flows from newly-annexed regions would directly contribute to continued bypassing of flows through the stormwater treatment system, which provides only primary treatment and chlorination prior to river discharge. This must be balanced against the potential groundwater quality and public health benefits of sewerage outlying areas that now rely on on-site waste disposal. It must also be weighed against the fact that the two stormwater clarifiers must be made available for conversion to secondary clarifiers before the ultimate planned capacity of the treatment plant can be utilized.

The decision to expand Spokane's service area prior to complete stormwater separation (Phase 2) will be made by DOE and the appropriate local agencies. Prior to making that decision, it would be valuable to obtain further information on the amount of stormwater that may remain in the sanitary sewer system even after Phase 2 is completed.

Stormwater Treatment

The proposed CSO control action includes construction of a separate storm sewer system throughout the city, with discharge of all collected stormwater runoff directly to

the Spokane River without the benefit of treatment. This has led to several concerned responses to the Draft EIS. The primary concern is over impact on water quality.

Data collected for the stormwater discharge analysis were obtained primarily from city treatment plant staff. The measurements were taken in existing Spokane stormwater facilities. To make comparisons of existing and post-project impact on the river, the water quality parameters listed in Table B-10 of the Draft EIS were applied to the flow estimates recorded in Table B-11. The proposed action (Alternative 3) and the other alternatives were compared to the existing situation (no action) by totalling the pollutant inputs from each of the flow components. The results of the analysis are presented on pages 98 to 106 of the Draft EIS. The proposed action would reduce flows through the treatment plant, reduce CSOs and increase direct stormwater runoff to the river.

The stormwater runoff can contain a variety of undesirable substances as noted in Table B-1 of the Draft EIS. Our analysis indicated that suspended solids would show the most significant increase under the proposed action. With an average suspended solids content of 172 mg/l and a projected storm flow of 5,120 mgd, approximately 2,800 tons of suspended solids would reach the river through stormwater outfalls. This compares to a total of 1,720 tons being discharged by the city through its present wastewater system. This analysis considers only the point-source discharges to the river; direct runoff that is not carried in the wastewater system has not been measured. There are insufficient data to analyze some of the other potentially harmful stormwater components such as oil, salts, metals and pesticides. With an increase in untreated direct runoff, it is likely that more of these deleterious materials will reach the river. However, the city could mitigate this problem by implementing a variety of control practices for urban runoff. Screening of all stormwater outfalls, more vigorous street cleaning efforts and paving of dirt roads are logical first steps toward reducing stormwater discharge impacts on water quality. This can be combined with a variety of other actions including but not limited to the following: dry weather flushing of storm drain catchment basins, investigation of different deicing techniques, diversion of storm flows to percolation/groundwater recharge basins, tighter control over used oil disposal, and initiation of a public education program to keep toxic materials used at home out of the storm drain system.

It is possible that there will eventually be federal or state treatment requirements for stormwater discharges, but at this time EPA and DOE are simply encouraging adoption of suitable control measures. If treatment requirements do become a reality, the separated stormwater and sanitary

wastewater systems should facilitate treatment. Without implementation of control practices, stormwater discharges will carry an unnecessarily large amount of suspended solids, debris and a variety of chemical compounds into the river; this will be especially true when storms follow an extended dry period.

Export of Wastewater to Crab Creek

The Latenser Plan for CSO control, analyzed in the Draft EIS, calls for export of all Spokane wastewater from the Spokane River drainage basin. The wastewater would be given secondary treatment and piped to upper Crab Creek, where it would be discharged to the natural stream bed for transport to farmland in the Odessa area. This plan is not being pursued by the City of Spokane or EPA for a variety of reasons, some financial and some strictly environmental.

The financial implications were presented in Chapters 2 and 4 of the Draft EIS. The Latenser Plan presents both the highest capital cost and highest average annual cost of all the alternatives considered. The city's share of construction costs are estimated to be about \$68 million; this is more than the entire anticipated cost of both phases of the proposed action.

The environmental implications of the Latenser Plan are also significant. First, the storage and feed-back method of controlling CSOs does not completely eliminate the discharge of untreated sanitary wastes to the Spokane River. Due to the sizing of storage facilities, CSOs would still occur about once a year. Second, all stormwater entering the Spokane collector system would still be funneled through the treatment plant; this eliminates chances of turning the Spokane system into a regional wastewater facility.

Use of Crab Creek as a conveyance for secondary effluent poses some serious water quality and public health questions. The dry season discharge of effluent to Crab Creek would not only violate state water quality guidelines and policy, it could create a serious hazard to the stream's fishery and public use of the stream. This includes potential groundwater contamination where Crab Creek flow becomes subterranean, downstream from Odessa. These concerns were discussed in Chapter 4 of the Draft EIS and are reiterated in letters of comment from the U. S. Soil Conservation Service and the Washington Department of Game.

Finally, construction of the open 50 million gallon CSO storage reservoir envisioned in Riverside State Park (across the river from the treatment plant) would have several

significant conflicts. The planned site is on state park property that is planned for use as an equestrian center beginning in the summer of 1979. As such, the open reservoir would not be acceptable to the Washington State Parks and Recreation Commission (see their letter of comment on the Draft EIS). Also, this area of Riverside State Park contains potentially significant historic and archeological resources in the form of Indian encampments and Fort George Wright military trash dumps.

Phasing of the Proposed Action

As stated in Chapter 2, the proposed action was divided into two phases because there are not sufficient state and federal grant funds available to finance the entire project at this time. Phase 1 is expected to receive 75 percent federal, 15 percent state and 10 percent local funding. Sewer separation in the Hollywood and Meenach drainage areas is estimated to cut annual CSOs in Spokane by about 84 percent.

Phase 2 timing and funding will receive further evaluation after Phase 1 has been completed and analyzed. The Phase 2 planning should be conducted after more information is made available on the effectiveness of the planned sewer separation in other parts of the city. Additional areawide 201 planning for unincorporated areas surrounding Spokane should also be completed by the end of Phase 1; this should aid in developing a schedule for Phase 2 separation and eventual connection of outlying areas to the city system.

Because the initiation of Phase 2 CSO control is at least 5 years in the future, it is expected that additional engineering, economic and environmental evaluation will be warranted before design of the project is undertaken. Additional public input into Phase 2 planning will also be sought prior to any final action. Funding and scheduling of Phase 2 cannot be determined until Phase 1 is complete and a reevaluation has occurred. Both EPA and DOE are unable to commit specific funding levels to Phase 2 because it is impossible to determine the overall level of funding that will be available to these agencies 5 years from now.

Chapter 4

RESPONSES TO SPECIFIC COMMENTS

Introduction

The following pages are devoted to responding to individual comments received on the Draft EIS. Individual letters are included and the comments in each letter have been given numbers. Responses, numbered to correspond to the comments, immediately follow each letter. Oral comments received at the EIS public hearings are also included in this chapter. Only those oral comments requiring a response are included. Each comment is followed by a response. For a complete version of the oral testimony see the attached public hearing transcripts.

Written Comments

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Room 360, U.S. Courthouse, Spokane, Washington 99201

March 20, 1979

Donald P. Dubois
Regional Administrator
U.S. Environmental Protection Agency
Region 10
Seattle, WA 98101

Dear Mr. Dubois:

The Soil Conservation Service has reviewed the draft environmental impact statement for City of Spokane Combined Sewer Overflow Abatement Project.

Our comments are applicable to the "Latenser Plan" alternative only.

1. We believe the draft environmental impact statement should address action to be taken following construction of the pipe from the treatment plant to Crab Creek regarding reestablishment of vegetation. Disturbed soils are susceptible to both wind and water erosion and protection should be assured.
2. The draft environmental impact statement does not appear to address the impact of the flow of effluent down Crab Creek. Sections of the creek contain porous soils which may allow substantial seepage into surrounding ground water.
3. We believe the draft environmental impact statement should address the potential impact of irrigating the land near Odessa with the effluent.

Thank you for the opportunity to review this draft environmental impact statement. If we can be of further assistance, feel free to contact our office.

Sincerely,

Galen S. Bridge

Galen S. Bridge
State Conservationist

RECEIVED

MAR 26 1979

ED 1512

RECEIVED
MAR 23 1979
OFFICE OF
REGIONAL ADMINISTRATOR

U. S. Department of Agriculture, Soil Conservation Service

1. As noted in Chapter 2 of this report, the proposed CSO control action does not include export of wastewater to Crab Creek. Therefore, the project should not affect Crab Creek or the surrounding agricultural land. If this export scheme were to be implemented, steps would have to be taken to protect disturbed areas from soil erosion. This would undoubtedly include regrading, disposal of excess spoil and revegetation. Contact with the Soil Conservation Service would be necessary to identify any additional control techniques that have proved to be effective in the area.

The potential for contamination of groundwater and erosion of irrigated areas was discussed briefly in the Draft EIS on pages 133 and 134. Additional analysis is not deemed necessary at this time because the Latenser CSO control option is not being proposed for action.



DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
P.O. BOX C-3755
SEATTLE, WASHINGTON 98124

NPSN-PL-ER

23 MAR 1979

Roger K. Mochnick, M/S 443
201 EIS Coordinator
U.S. Environmental Protection
Agency, Region X
1200 Sixth Avenue
Seattle, Washington 98101

RECEIVED
MAR 26 1979
ENVIRONMENTAL EVALUATION
BRANCH

Dear Mr. Mochnick:

We have reviewed the draft environmental impact statement (EIS) for the City of Spokane Combined Sewer Overflow Project, Spokane, Washington, with respect to the U.S. Army Corps of Engineers' areas of responsibility for flood control, navigation, hydropower, and regulatory functions. We have the following comments:

1 | a. Chapter 3, titled "Laws, Rules and Policies Affecting the CSO Abatement Project," should include the following statement:

"A Department of the Army permit may be required for the discharge of fill in and/or on wetlands adjacent to waters of the United States under the provisions of Section 404 of the Clean Water Act as implemented by 33 CFR, Part 323."

b. Page 206, section titled "Flooding:"

2 | (1) The report referred to in the second paragraph is now completed.

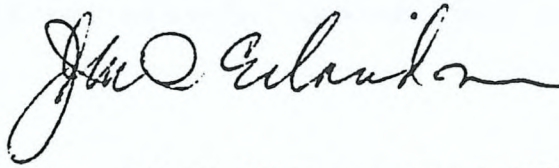
3 | (2) The EIS should address the impacts of the proposal and the alternatives on flooding. In addition, no aggravation of flooding should be generated.

NPSEN-PL-ER

Roger K. Mochnick, M/S 443

Thank you for the opportunity to comment on this statement. If you have any questions, please feel free to contact Dr. Steven F. Dice, telephone (206) 764-3624, of my staff.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Sidney Knutson".

SIDNEY KNUTSON, P.E.
Asst. Chief, Engineering Division

U. S. Department of Army, Corps of Engineers

1. The statement included under a. in the Corps of Engineers letter is acknowledged and incorporated into the Final EIS.
2. Completion of the Corps of Engineers report on flooding in Spokane is acknowledged.
3. The impact of the proposed project and its alternatives on local street and basement flooding is described on pages 115-117 of the Draft EIS. None of the alternatives would have a significant effect on flooding along the Spokane River or Hangman Creek. The amount of stormwater either stored or passed directly to the Spokane River by the CSO projects is insignificant compared to the river's flood flows. There are no structures planned that would encroach on the river floodplain and thereby increase the threat of flooding in the vicinity.



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
ARCADE PLAZA BUILDING, 1321 SECOND AVENUE
SEATTLE, WASHINGTON 98101

April 10, 1979

REGION X

Office of Community
Planning & Development

IN REPLY REFER TO:

10C

Mr. Roger K. Mochnick
201 EIS Coordinator, M/S 443
U.S. Environmental Protection
Agency, Region X
1200 Sixth Avenue
Seattle, Washington 98101

RECEIVED
APR 12 1979
ENVIRONMENTAL EVALUATION
BRANCH

Dear Mr. Mochnick:

Re: Draft Environmental Impact Statement
Combined Sewer Overflow - City of Spokane

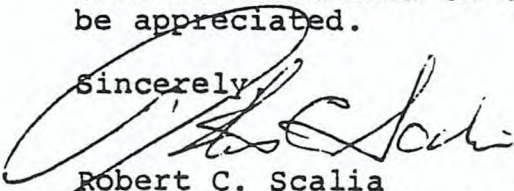
We have reviewed the statement submitted with Mr. Dubois' February 20 letter.

Following are our comments:

- 1) We suggest the impact in the sole source aquifer be noted under each alternative. Specifically, wouldn't a no action alternative have a high potential for impacting the aquifer in the future?
- 2) Under the National Urban Policy EPA projects should be planned to minimize or prevent urban sprawl. Shouldn't local governments be alerted to this policy so that appropriate future plans can be made in regards to regionalization of treatment facilities?
- 3) Will relocation plans be prepared to assist the residents in Peaceful Valley that may be affected by this proposed action?

Your consideration of the above in the final statement will be appreciated.

Sincerely,


Robert C. Scalia
Director, Regional Office
of CPD

U. S. Department of Housing and Urban Development

1. The regionalization discussion in the Draft EIS (pages 158 to 170) states that only Alternative 3 (proposed action) is capable of making Spokane wastewater service available to outlying areas. Therefore, only Alternative 3 can have a positive influence on wastewater contamination of the aquifer. By eventually providing wastewater service to currently unsewered areas of the county, on-site disposal systems can be removed from land overlying the aquifer. As growth continues in these suburban areas, the importance of this sewerage will increase. If any of the other Spokane CSO options were implemented, including "no-action", removal of on-site disposal systems would be left to other facilities planning action by the county or other appropriate agency. There would definitely be the potential for increased impact on the aquifer if no-action is taken.

2. The local and regional planning agencies of the Spokane area have been contacted and have taken part in the Spokane CSO planning effort. They should therefore be aware of the implications of regionalization in terms of future growth in the area. There is considerable effort now underway to coordinate city and county development plans, especially with regard to wastewater treatment service.

As indicated in the comment, the National Urban Policy discourages continued urban sprawl. Regionalization of wastewater treatment service through the Spokane facilities should encourage infill in those outlying areas connected to the system.

3. Residents in Peaceful Valley would not be displaced by the proposed action, therefore no relocation plans are proposed. Only if storage or satellite treatment were implemented would there be residential displacement. If storage or satellite treatment facilities were to be placed in the Peaceful Valley area, the city would have some obligation to aid in relocation efforts.



United States Department of the Interior

OFFICE OF THE SECRETARY

PACIFIC NORTHWEST REGION

500 N.E. Multnomah Street, Suite 1692, Portland, Oregon 97232

RECEIVED

April 18, 1979 APR 19 1979

ER-79/189

ENVIRONMENTAL EVALUATION
BRANCH

Mr. Roger K. Mochnick
201 EIS Coordinator
Environmental Protection Agency
1200 Sixth Avenue
Seattle, Washington 98101

Dear Mr. Mochnick:

We have reviewed the draft environmental statement for Spokane Combined Sewer Overflow Project, Spokane County, Washington. The following comments are provided for your consideration when preparing the final document.

1 | Analysis of the effects of the project on ground water should include assessing the significance of reduced local recharge of ground water from septic tanks and other onsite wastewater disposal systems.

2 | The DES does not discuss mineral resources such as sand and gravel. This lack of discussion may mean there are no impacts or it may be an oversight. Sand and gravel deposits would be impacted if pipelines, storage facilities, or treatment plants were to be constructed across them. Construction would require supplies of sand and gravel which would probably be mined from nearby deposits.

One feature that might be considered is use of mined-out sand or gravel pits for storage or treatment facilities.

Despite the foregoing comments, mineral involvement and impacts are not expected to be of major importance in the choice of alternatives.

3 | On page 5, damages caused by installation are mentioned, but the statement fails to specify adverse environmental impacts. In Chapter 6 Affected Environment and Appendix A on page 233, the setting and relative degree of project impacts are treated, but relationships of those effects on biota are ignored. The statement fails to discuss the types of habitat and dependent wildlife which will be damaged or destroyed, or what will be done to mitigate those losses. Significant fish and wildlife resources exist in the project area of impact.

4

A main function of the new plant is described as phosphorus removal. Beneficial uses of the Spokane River that would be enhanced by reduced phosphorus loading with resultant algae reduction are fish and wildlife. In view of this emphasis on nutrient removal as a major project objective for water quality enhancement, it is difficult to reconcile lack of planning coordination with construction of the upriver Liberty Lake wastewater treatment facility which does not plan to have phosphorus removal.

As stated on page 208, the reach upstream from Millwood, to be impacted by the Liberty Lake facility, is rated by the Washington Department of Game as one of the top ten unique ecosystems in Spokane County. Yet the only protection provided by the Liberty Lake project for the unique natural trout fishery is dechlorination. Anticipated heavy phosphorus loading under low flows would severely degrade this aquatic ecosystem and reduce the benefits of the proposed project.

Considering the wide area and diversity of values stated as being served by the project, the document should discuss relationships of those upstream impacts to the project function and design.

Regionalization aspects of waste treatment are described on pages 166-170, but that discussion fails to address the immediacy of Liberty Lake and other upriver developments as related to Spokane River water quality.

5

The principal concern of this Department's National Park Service relating to this project is the effect upon water quality in the Spokane Arm of Lake Roosevelt. Water quality in the Arm, of course, is governed largely by the quality of the Spokane River which feeds the Arm via Long Lake and Little Falls reservoirs.

As has been noted in the draft statement (page 125), the Spokane Arm portion of the Coulee Dam National Recreation Area receives intensive water recreation use by the public each year. Public use here, as measured by statistics on the numbers of swimmers and boats launched at our two largest developed sites on the Arm, has been increasing at a greater annual rate than it has in most other parts of the National Recreation Area. A visitor survey conducted by the National Park Service last summer showed that over half of the visitors using the Spokane Arm are from the city of Spokane or its surrounding communities.

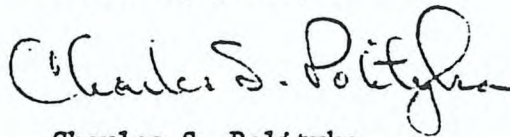
The draft statement (page 125) suggests that water pollution in the Spokane Arm is not now discouraging visitor use. We believe that presumption is untrue. We have recently conducted several public workshops in communities surrounding Lake Roosevelt to obtain citizen input for a General Management Plan for the National Recreation Area, and in the course of these workshops a number of citizens expressed a deep concern over water pollution in the Spokane Arm. Written comments elicited from our visitor survey last summer exhibited a deep concern over the health aspects of swimming in the Spokane Arm.

5 | Furthermore, our information from qualified biologists is that the toxic Anabaena algal blooms that occurred in the Spokane Arm last summer are the direct result of unnaturally high amounts of nutrients in the water. It is our belief that storm sewer discharge from the city of Spokane into the Spokane River is a major source of this nutrient pollution into Lake Roosevelt.

6 | On page 206, under Biological Resources, the bald eagle should be treated as a species designated as threatened in the State of Washington under the Federal Endangered Species Act.

Thank you for the opportunity to review this document.

Sincerely yours,

A handwritten signature in cursive script that reads "Charles S. Polityka". The signature is written in dark ink and is positioned above the printed name and title.

Charles S. Polityka
Regional Environmental Officer

U. S. Department of the Interior

1. According to the U. S. Geological Survey (Open File Report 77-829, 1978) the Spokane Valley-Rathdrum Prairie aquifer has not shown a long-term change in storage over the past 50 years. Discharge and recharge are essentially equal. This equilibrium has persisted in spite of an estimated net industrial and agricultural pumping loss to the aquifer of 175 cubic feet per second (cfs) and a 64 cfs loss from existing sewer collection systems. If all of the estimated 11.5 MGD of wastewater generated in Spokane Valley by 1990 were collected in sewers and transported to Spokane for treatment, this would be a net loss of only 17.8 cfs. Therefore, it appears unlikely that elimination of on-site wastewater disposal systems in the Spokane area will cause a significant change in recharge of the aquifer. It will, however, reduce the threat of public health hazards being created by wastewater contamination of the aquifer.
2. The proposed CSO control action will require construction of about 220 miles of new storm sewers. Nearly all of this construction will occur in existing rights-of-way. Therefore, it is unlikely that the project will affect the development of sand and gravel resources. There are extensive sand and gravel deposits in the Spokane area including developed pits near Felts Field and Riverside State Park. There are also extensive deposits in undeveloped areas. Because it does not appear that mineral resources will be significantly affected by the proposed action, this subject area was not discussed in the Draft EIS. This is in keeping with the new CEQ guidelines for EIS preparation, which encourage consideration of only the significant environmental issues.
3. Chapter 6 of the Draft EIS presents a summarization of the environmental setting data reviewed in preparation of the Spokane CSO impact analysis. Our review of biological data included discussions with local Washington Department of Game officials and field surveys of all proposed construction sites. Our analysis indicated that loss of vegetation and wildlife disturbance would not be a significant factor, especially for the proposed project which is limited primarily to construction within existing rights-of-way. Therefore, biological impacts were not discussed in detail.

It should be noted, however, that the noise and increased human activity associated with construction will disturb wildlife frequenting the Spokane urban area. This includes a large number of bird species and a variety of rodents and small mammals. If any of the storage options or satellite treatment were selected for CSO control, construction of storage basins or satellite plants at sites 9B and 16B (see Figure 2-3 in the Draft EIS) would remove relatively undisturbed wildlife habitat. Site 9B contains grassland and scattered

pinus while site 16B contains a mixture of pines and bankside deciduous trees and shrubs. This would require relocation of those species utilizing the habitat. No rare or endangered species are expected to be affected. However, it would be desirable from a wildlife standpoint to relocate these two storage/satellite treatment sites to already disturbed areas if storage or satellite treatment were selected for implementation.

4. The potential for and environmental implications of wastewater service regionalization are discussed on pages 158 to 170 of the Draft EIS. This analysis is somewhat restricted because the project being analyzed seeks primarily to control CSOs. There is no new plant under consideration in this project. The effect of the CSO control strategy on Spokane treatment plant capacity was determined to be only a peripheral issue to the main project objective - reduce public health threats in the Spokane River by eliminating discharge of untreated wastes to the river.

The impact analysis indicates that CSO control does not have a major effect on nutrient loadings in the river, it would, however, have a significant impact on contamination of the river with pathogenic organisms. Therefore, a detailed analysis of nutrient inputs and conditions up and down the length of the Spokane River was not undertaken. Such an analysis was considered beyond the requirements of the CSO issue. This EIS was considered an inappropriate vehicle for discussing broader regionalization plans of the entire area. As such plans are developed by the appropriate agencies, the public and other agencies will be afforded an opportunity to participate.

5. The Draft EIS suggests on page 125 that CSOs from the City of Spokane are apparently not discouraging visitor use in the Spokane Arm of Roosevelt Lake. This did not intend to indicate water pollution in general was not affecting visitor use of the lake. The fact that park planning and public surveys suggest water quality is a concern at the lake is important to pollution control planning along the entire Spokane River.

Opinions received from users of the Spokane River near Spokane contain similar feelings about river pollution. The findings of numerous personal interviews are included in pages 118 to 125 of the Draft EIS. However, it is important to reiterate the EIS findings on the source of pollution. Data compiled from numerous sources suggest that Spokane's CSOs contribute only about 1 percent of the total annual phosphorus and nitrogen reaching Long Lake. This low nutrient input is not likely to be the cause of recent algal blooms in Long Lake and the Spokane arm of Roosevelt Lake. There are numerous sources of pollution affecting the Spokane River and CSOs are only a small factor.

6. Reference to the threatened status of the bald eagles is acknowledged and included as part of the Final EIS.



DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

MAILING ADDRESS (dp1)
COMMANDER
THIRTEENTH COAST GUARD DISTRICT
915 SECOND AVE.
SEATTLE, WASH. 98174
PHONE 206 442-7523

16476
DPL79-261

23 MAR 1979

Mr. Donald P. Dubois
Regional Administrator
U. S. Environmental Protection Agency
Region 10
Seattle, WA 98101

Dear Mr. Dubois:

/ We have reviewed your draft environmental impact statement of January 1979 addressing the City of Spokane Combined Sewer Overflow Abatement Project. We have no comments.

Thank you for the opportunity to review the document.

Sincerely,

A handwritten signature in black ink, reading "Richard F. Malm".

RICHARD F. MALM
Captain, U. S. Coast Guard
Chief of Staff
Thirteenth Coast Guard District

U. S. Department of Transportation - Coast Guard

1. No response is required.

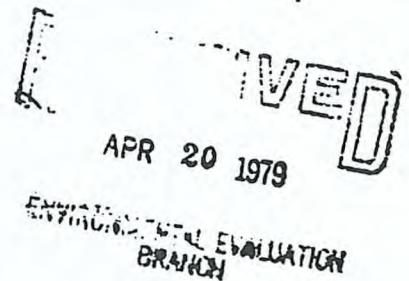
**Advisory
Council On
Historic
Preservation**

1522 K Street NW.
Washington D.C.
20005

Reply to: P. O. Box 25083
Denver, Colorado 80225

April 16, 1979

Mr. Roger K. Mochnick, M/S 443
201 EIS Coordinator
Environmental Protection Agency
Region X
1200 Sixth Avenue
Seattle, Washington 98101



Dear Mr. Mochnick:

Thank you for your request of February 21, 1979, for comments on the draft environmental statement (DES) for the City of Spokane Combined Sewer Overflow Abatement Project. Pursuant to Section 102(2)(C) of the National Environmental Policy Act of 1969 and the Council's regulations for the "Protection of Historic and Cultural Properties" (36 CFR Part 800), we have determined that your DES mentions properties of cultural and/or historical significance; however, we need more information in order to evaluate the effects of the undertaking on these resources. Please furnish additional data indicating:

1

Compliance with Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. Sec. 470f, as amended, 90 Stat. 1320).

The environmental statement must demonstrate that either of the following conditions exists:

1. No properties included in or that may be eligible for inclusion in the National Register of Historic Places are located within the area of environmental impact, and the undertaking will not affect any such property. In making this determination, the Council requires:

--evidence that you have consulted the latest edition of the National Register (Federal Register, February 6, 1979, and its monthly supplements);

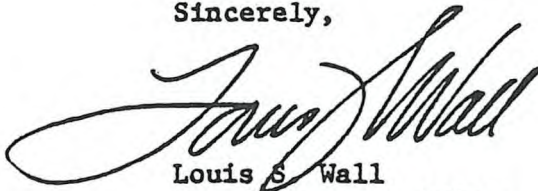
Page 2
Mr. Roger K. Mochnick
City of Spokane
April 16, 1979

1 —evidence of an effort to ensure the identification of properties eligible for inclusion in the National Register, including evidence of contact with the State Historic Preservation Officer, whose comments should be included in the final environmental statement. The State Historic Preservation Officer for Washington is Louis Guzzo.

2. Properties included in or that may be eligible for inclusion in the National Register of Historic Places are located within the area of environmental impact, and the undertaking will or will not affect any such property. In cases where there will be an effect, the final environmental impact statement should contain evidence of compliance with Section 106 of the National Historic Preservation Act through the Council's regulations for the "Protection of Historic and Cultural Properties" (36 CFR Part 800).

Should you have any questions, please call Brit Allan Storey at (303) 234-4946, an FTS number.

Sincerely,



Louis S. Wall
Chief, Western Office
of Review and Compliance

Advisory Council on Historic Preservation

1. As requested, the latest update of the National Register of Historic Places (Federal Register, February 6, 1979) was consulted to determine if properties of historic significance might be affected by the proposed action. The February 6 listing (and its latest monthly supplement, June 5, 1979) included several more historic spots in Spokane, but the proposed storm sewer construction project will not adversely affect any of the properties. All storm sewer construction will be conducted in existing rights-of-way. Some properties will suffer temporary access problems, but this will last only as long as construction and is not deemed significant.

In order to verify the status of historic and archeological resources in the Spokane area, the Washington Archeological Research Center in Pullman, Washington was contacted a second time. No new archeological site information was reported through that contact. The Washington State Historic Preservation Office was also contacted. Its letter of comment is included in this chapter.

As stated in the Draft EIS, all pipeline construction in the vicinity of the Spokane River should be closely monitored for possible discovery of unrecorded archeological sites. Surface reconnaissance in urbanized areas is not effective at locating archeological material, and lands bordering the river should be considered archeologically sensitive. The city's recently prepared historic landmarks survey (Keller, n.d.) should also be consulted when it is made available for public review.



STATE OF
WASHINGTON

Dixy Lee Ray
Governor

DEPARTMENT OF ECOLOGY

Olympia, Washington 98504
Mail Stop PV-11

206/753-2800

April 19, 1979

Mr. Roger K. Mochnick
201 EIS Coordinator
U. S. Environmental Protection
Agency - Region X
1200 Sixth Avenue
Seattle, Washington 98101

Dear Mr. Mochnick:

Thank you for providing us with review copies of your draft environmental impact statement for the proposed "City of Spokane, Combined Sewer Overflow Abatement Project."

Your impact statement has been reviewed by Department of Ecology staff in Olympia and in our Eastern Regional Office in Spokane. We wish to offer the following comments for your consideration in preparation of the final environmental impact statement.

1. We agree that the construction of separate storm sewers is the most desirable option for abating the problem of combined sewer overflows in Spokane.
2. The DOE is committed to insuring the correction of all combined sewer overflows by the City of Spokane regardless of the availability of state and federal funds for this purpose.

In addition, a schedule for sewer separation must be developed prior to significant expansion of the sewer service area.

3. The DOE is not committed to funding Phase II of the Spokane CSO project. At the conclusion of Phase I (approximately five years hence), DOE will reevaluate the entire CSO project in terms of our continued commitment of federal and state grant funds. Phase II will be rated and ranked relative to the other projects on the fiscal year's priority list. The Phase I funding allocation is:

EPA (75%)	=	\$20,085,000
DOE (15%)	=	4,017,000
City of Spokane (10%)	=	<u>2,678,000</u>
TOTAL		\$26,780,000

4. The EIS states, with regard to the Hollywood and Meenach drainage areas, "Separation of stormwater in these two drainage areas would remove approximately 84% of the CSO that now flows into the Spokane River each year. This can be accomplished for approximately 39% of the total construction cost of Alternative 3."

Mr. R. K. Mochnick

April 19, 1979

Page two

3 | These figures are quoted in several sections of the EIS. Obviously they are important in determining the boundaries of the Phase I project area and the level of grant participation in the project. However, we are unsure of the validity of storm flow data used to develop these percentages. Information should be obtained which can verify the validity of these estimated removal percentages.

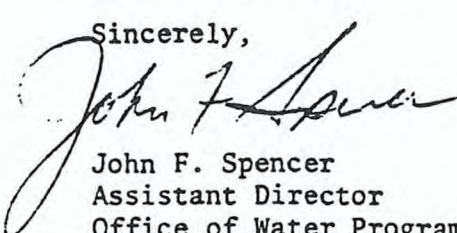
4 | 5. Page 39 -- It is possible that at some future date there may be federal requirements developed which will require treatment of stormwater discharges. At the very least, it appears that EPA is promulgating regulations which would require the issuance of a general National Pollutant Discharge Elimination System permit to cover stormwater discharges. This general permit may require that some combination of Best Management Practices (BMP) be implemented.

5 | 6. Page 190 -- It is widely recognized that separation of storm sewers will free capacity at the treatment plant and allow for expansion of the sewer service area. This section in the EIS points out that Phase I separation removes only a minimum amount of storm flows at the treatment plant. We believe it is extremely important that everyone concerned with the project understand that significant expansion of the sewer service area cannot occur until Phase II separation is undertaken.

In conclusion, we feel that a further breakdown in the EIS of Phase II into subphases based on hydraulic integrity, water quality impact, and contribution toward freeing excess capacity at the city sewage treatment plant, would be very helpful. Subphasing of Phase II will allow better decisions on the funds available each year during the Phase II CSO time frame and will insure the best possible combination of federal, state, and local funding.

Should you have questions concerning these comments or any other phase of our involvement in this proposal, please contact Mr. Claude Sappington of our Eastern Regional Office in Spokane at (509) 456-2926.

Sincerely,


John F. Spencer
Assistant Director
Office of Water Programs

JFS:as

cc: Claude Sappington, Eastern Region
Myron Saikewicz, Water Programs
Dennis Lundblad, Comprehensive Management

Washington Department of Ecology

1. No response required.
2. These comments have been considered in preparing the general response entitled Phasing of the Proposed Action (Chapter 3). It is recognized that the DOE funding allocation amounts are higher than those included in Table 5-3 of the Draft EIS and page of the Final EIS because the DOE numbers contain additional design and engineering costs not added into the original construction cost estimates.
3. The data used to predict an 84 percent removal of annual CSO volume were taken from the Facilities Planning Report for Sewer Overflow Abatement (Text) prepared by the Spokane City Department of Public Works (1977). Table 1 (page 7) of the Text volume lists all combined sewer overflow points and their average frequency, duration and volume of discharge. The city's data had been taken with only minor modification from the Spokane Wastewater Study prepared for the city in 1972 by Esvelt and Saxton/Bovay Engineers, Inc. To our knowledge, no other comprehensive survey of CSOs has been undertaken. It is our understanding that the Esvelt and Saxton/Bovay figures are based on calculations, using drainage basin acreage, weir capacities and climatic data. No systematic program of field measurements was conducted. The data are therefore only estimates and should be considered as such. These numbers will be refined in the design stage of the project to more accurately reflect the current overflow situation.
4. This comment has been considered in preparing the general response entitled Stormwater Treatment (Chapter 3).
5. These comments have been considered in preparing the general response entitled Phasing of the Proposed Action (Chapter 3).



STATE OF
WASHINGTON

Dixy Lee Ray
Governor

DEPARTMENT OF FISHERIES

115 General Administration Building, Olympia, Washington 98504

206/753-6600

February 23, 1979

Mr. Roger K. Mochnick
201 EIS Coordinator
U.S. EPA, Region X
1200 6th Avenue
Seattle, Washington 98101

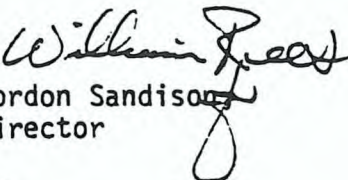
Dear Mr. Mochnick:

Draft EIS for City of Spokane
Combined Sewer Outfall Abatement
Spokane County WRIA T-54-57

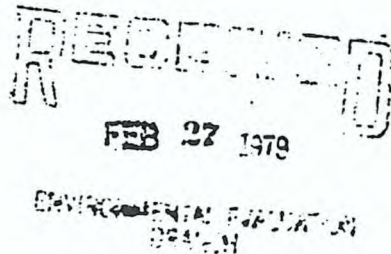
The Washington Department of Fisheries has reviewed the above referenced document. Since the proposal does not appear to involve direct or indirect impacts upon resources under this Departments jurisdiction, we do not wish to make any comment at this time.

Thank you for the opportunity to review and comment.

Sincerely,


Gordon Sandison
Director

mr



Washington Department of Fisheries

1. No response required.



STATE OF
WASHINGTON

Dixy Lee Ray
Governor

DEPARTMENT OF GAME

600 North Capitol Way/Olympia, Washington 98504

206/753-5700

April 13, 1979

Mr. Donald Dubois
Regional Administrator
U. S. Environmental Protection Agency
Region 10
Seattle, Washington 98101

RECEIVED
EPA - REGION 10
APR 18 1979
WATER DIVISION

ENVIRONMENTAL IMPACT STATEMENT:

City of Spokane Combined Sewer Overflow
Abatement Project, Spokane County

Dear Mr. Dubois:

Your document has been reviewed by our staff as requested; our comments follow.

1 We recognize the need to control combined sewer overflow for reasons concerning public health, recreation, aesthetics, and economics. We must, however, raise objections to any abatement alternative which would compromise water quality components affecting fish in either the Spokane River, Long Lake, or Crab Creek. In addition to the brown trout fishery mentioned in the EIS, there is a significant wild rainbow trout population in Crab Creek, providing a quality fishery. Rainbow trout are more sensitive than brown trout to decreases in dissolved oxygen, or increases in water temperature.

2 Therefore, Alternative #1 is the only abatement plan we are supportive of. Alternative #3 would allow untreated stormwater runoff to enter the river. This water can be expected to contain cadmium, lead, mercury, arsenic, asbestos, petrochemicals and other toxic substances, as stated in the EIS. Fecal coliform levels as high as 11,000 MPN per 100 ml have been measured in Spokane stormwater, as mentioned on page 112 of the EIS. Alternative #3 does not incorporate any controls against accidental spills into storm drains.

3 Alternative #3 may accelerate sewerage of the Spokane Valley. It has been suggested, however, that interceptor lines large enough to accommodate projected wastewater flows will be larger than existing city lines, which could create a major bottleneck resulting in more overflows or back ups.

RECEIVED

APR 20 1979

EPA-FIS

RECEIVED

APR 17 1979

Office of
Regional Administrator

Page 2
April 13, 1979

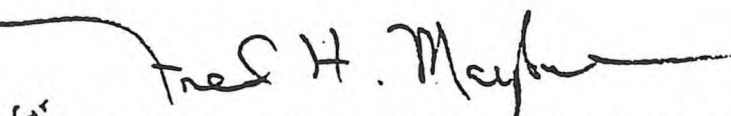
4 The U. S. Army Corps of Engineers Study (1976) prepared by Kennedy-Tudor Consulting Engineers omits mention of two fish species: Kokanee (*Oncorhynchus nerka*) occur in both Long Lake and Little Falls impoundments. And, a substantial wild eastern brook trout (*Salvelinus fontinalis*) population occurs in all of the Spokane River, especially above Upriver Dam, and in the Little Spokane River.

In summary, we feel Alternative #1, or any other alternative plan which would provide for storage lagoons where stormwater runoff can be collected and treated at a later date, provides the most comprehensive solution to the CSO problem. Such a system would appear to be the only alternative which would not simply relocate the problem or replace one set of pollutants with another.

Thank you for the opportunity to review your document. We hope our comments are helpful.

Sincerely,

THE DEPARTMENT OF GAME


for Douglas A. Pineo, Applied Ecologist
Habitat Management Division

DP:mjf

Washington Department of Game

1. These comments are considered in the general response entitled Export of Wastewater to Crab Creek (Chapter 3).
2. These comments are considered in the general response entitled Stormwater Treatment (Chapter 3).
3. If interceptor sewers are constructed in Spokane Valley to convey wastewater to the Spokane treatment plant, they will not be sized so that hydraulic overloading of city interceptors would occur. Connections would be made to city lines with sufficient capacity or a new interceptor through the city would be necessary.
4. These comments are acknowledged and made a part of the Final EIS.



STATE OF
WASHINGTON

Dixy Lee Ray
Governor

OFFICE OF ARCHAEOLOGY AND HISTORIC PRESERVATION
111 West Twenty-First Avenue, Olympia, Washington 98504 206/753-4011

June 26, 1979

Ms. Deborah Kirk
Environmental Protection Agency
Region 10
1200 Sixth Avenue M/S 443
Seattle, Washington 98101

RECEIVED

JUN 28 1979

EPA-FIS

Dear Deborah:

As per our previous conversation, I have the following comments regarding the Draft Environmental Impact Statement for the City of Spokane Combined Sewer Overflow Abatement Project.

- 1 The document exhibits a well considered concern for the cultural environment. The only changes I would recommend concern the publication of site locations. On page 177, the Draft states that the cultural resources report by Hartman and Robbins is available for public review at offices in Spokane and Seattle. Please be advised that site locational data are exempted from public disclosure under both federal and state law. The limitation of access to locational data is one of the most important protective measures available for archaeological resources. I would suggest that you delete that statement from the Final EIS and advise those offices with copies of the report to ensure its security except on a need-to-know basis. I also suggest that portions of the Draft which refer to specific site locations be amended for the same reasons.
- 2 I concur with the recommendation for professional testing and/or monitoring of high potential areas prior to or during construction. Those areas where sites have been identified within the project area should be professionally evaluated to determine anticipated impacts and to provide alternatives for mitigation of impact. If sites are within the area of project impact, it will be necessary to obtain a determination of eligibility for the National Register of Historic Places and the comments of the President's Advisory Council on Historic Preservation. In that event, this office will be pleased to assist in the necessary procedures.

Sincerely,

JEANNE M. WELCH, Deputy State
Historic Preservation Officer

A handwritten signature in dark ink, appearing to read "Sheila Stump".

Sheila Stump, Archaeologist

md

Washington Office of Archeology and Historic Preservation

1. The Draft EIS should be modified to indicate that all site location data are not available for general public review. Only the report narrative is available. Maps and locational descriptions are confidential. Anyone desiring site location information should contact the Washington Office of Archeology and Historic Preservation. Because this Final EIS does not include a reprinting of the entire Draft EIS, it is not necessary to delete the discussions of specific sites contained in the Draft.

2. As indicated in the response to comments from the Advisory Council on Historic Preservation, no known historic or archaeological sites will be significantly impacted by the proposed sewer separation construction. This includes sites listed on the National Register of Historic Places.



STATE OF
WASHINGTON

Dixy Lee Ray
Governor

OFFICE OF FINANCIAL MANAGEMENT

House Office Building, Olympia, Washington 98504 206/753-5450

Orin C. Smith, Director

April 26, 1979

Mr. Roger K. Mochnick
201 EIS Coordinator
U.S. Environmental Protection
Agency - Region X
1200 Sixth Avenue
Seattle, Washington 98101

Dear Mr. Mochnick:

Review of the Draft Environmental Impact Statement for the City of Spokane Combined Sewer Overflow Project has been completed by agencies of the State of Washington. The review was coordinated by the Office of Financial Management as the designated state clearinghouse.

Comments were received from the Washington State Parks and Recreation Commission and Department of Ecology. While it is understood that the Environmental Protection Agency (EPA) will respond directly to the enclosed comments, the agencies have identified several significant issues which are highlighted below for your consideration in evaluating the proposed project.

The State Parks and Recreation Commission comments are directed to the Latenser Plan alternative. Under the Latenser Plan, a pipeline and open storage reservoir would be constructed in Riverside State Park. In the discussion of the Long-Term Effects of New Facilities on Adjacent Land Uses on page 176, it is noted that the reservoir proposed under the Latenser Plan "would eliminate future recreation development in that vicinity". In view of the Commission's plans to develop an equestrian area at Fort George Wright in Riverside State Park, it is recommended that the Latenser Plan be withdrawn from further consideration as a possible alternative to the proposed project.

The Department of Ecology concurs with EPA's decision to propose construction of separate storm sewers as the most desirable option for abating the combined sewer overflows in the City of Spokane. The proposed action consists of two major phases, the first being construction of separate storm sewers in the Meenach and Hollywood drainage areas with the second phase providing separate storm sewers for the remainder of the City of Spokane.

RECEIVED

MAY 1 1979

Mr. Roger K. Mochnick

-2-

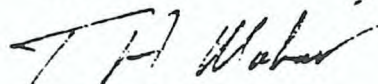
April 26, 1979

The funding allocation for Phase 1 assumes federal (75 percent), state (15 percent), and local (10 percent) cost sharing of construction costs. While a Phase 2 allocation is included in the discussion of Construction Costs and Cost Sharing of the proposed action, it is noted that Phase 2 is only speculative at this time. The Department reiterates that the state is not committed to funding Phase 2 of the project. State participation in Phase 2 would be subject to a detailed evaluation of the Spokane project at the conclusion of Phase 1. The Department of Ecology (DOE) would reevaluate the entire project in terms of continuing funding support at that time and the Phase 2 project would be rated and ranked relative to other projects on the fiscal year's priority list.

The Department also notes that significant expansion of the sewer service area cannot occur until a schedule for sewer separation is developed and the Phase 2 separation is undertaken. The Department concludes that a further breakdown of Phase 2 into subphases would be very helpful in considering future funding for the Phase 2 project.

Thank you for the opportunity to review the draft statement. We hope you will find these comments useful in your consideration of this proposal.

Sincerely,



Thomas A. Mahar
Assistant Director

TAM:de
enclosures

Washington Office of Financial Management

1. The letter from the Washington Office of Financial Management summarizes the comments received from other state agencies. The reader is referred to responses to comments from the Washington Department of Ecology and the Washington State Parks and Recreation Commission for information on the Office of Financial Management concerns.

WASHINGTON STATE PARKS AND RECREATION COMMISSION

MEMORANDUM

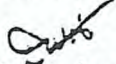
March 7, 1979

IN REPLY REFER TO:

35-2650-1820

Draft EIS - City of
Spokane - Combined
Sewer Overflow -
Abatement Project
(E-1571)

TO: Mike Mills, Policy Analysis Division
Office of Financial Management

FROM:  David W. Heiser, E.P., Chief
Environmental Coordination

SUBJECT: Draft EIS - City of Spokane - Combined Sewer Overflow -
Abatement Project

The staff of the Washington State Parks and Recreation Commission has reviewed the above noted document and has the following comments:

Page 7, Latenser Plan, Disruptions Caused by Construction Activities

An equestrian area at Fort George Wright in Riverside State Park will be constructed with the first stage in the summer of 1979. Construction of sewage facilities would disrupt equestrian use.

Page 73, Latenser Plan, Public/Semi-Public Facilities - Southeast Spokane

The storage bin, if constructed after the summer of 1979, would be constructed within a developed operating state park equestrian area.

Page 176, Latenser Plan, Long-Term Effects of New Facilities on Adjacent Land Uses.

The open reservoir in Riverside State Park, if within Fort George Wright, would interfere with and be detrimental to an existing developed and utilized equestrian area if the sewerage facility is contemplated to be built after the summer of 1979. This would not be acceptable to the State Parks and Recreation Commission because they plan to develop the area for equestrian use in the summer of 1979.

I have enclosed a copy of the staged development plan for the Equestrian Area. Mr. Mike Rushton of Jones & Stokes Associates, Inc. was previously contacted concerning the Latenser Plan. A copy of that letter is enclosed for your information.

Thank you for the opportunity to comment on this EIS.

DWH/PJP:jc

Enclosures



STATE OF
WASHINGTON

Dixy Lee Ray
Governor

WASHINGTON STATE PARKS AND RECREATION COMMISSION

7150 Clearwater Lane, Olympia, Washington 98504

206/753-5751

March 2, 1979

35-774-0555
35-774-0720
Riverside State Park - Fort
George Wright Equestrian Area -
Sewage Treatment Plant
Preliminary DEIS - Overflow
Abatement

Mr. Mike Rushton
Jones & Stokes Associates, Inc.
2321 P Street
Sacramento, California 95816

Dear *Mr. Rushton* Mr. Rushton:

Last November you sent me a packet of data relating to the DEIS which I had expected to receive long before now. Several things have happened since you wrote to me: my father was in the hospital for several months prior to passing away in early February and our regional staff have been preparing plans for development of the Fort George Wright area. Those plans are now being finalized and I have enclosed a copy for your use.

On the question of the deed restrictions that relate to non-recreational use of the land, I offer the following observations:

1. When the property was leased to Washington State Parks and Recreation Commission in 1963 there existed a number of outstanding easements of record across the property.
2. These include Washington Water Power, Salt Lake Pipeline Company, Pacific Northwest Bell, Great Northern Railway Company and the U.S. Government.
3. "For a period of twenty (20) years from the date of this conveyance, the property shall be continuously used and maintained as and for public park and public recreational area purposes, in accordance with the approved plan of utilization ..."

From the above restriction, I draw the conclusion that we have no authority to grant any easements for this property (such as the Latenser Plan) until 1983. It would still be a matter of some considerable controversy, since the property has been dedicated to equestrian use since the early 60's.

Mr. Mike Rushton

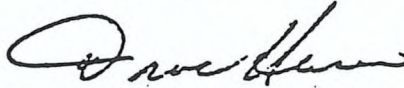
-2-

March 2, 1979

For the above reasons, I feel that the Latenser Plan is not viable at this location. If another site can be located, it might well be viable.

Thank you for the opportunity to provide this input. Please send me a copy of the DEIS when available. Thanks!

Sincerely,



David W. Heiser, E.P., Chief
Environmental Coordination

DWH:jc

Enclosure

Washington State Parks and Recreation Commission

1. Plans for the Riverside State Park equestrian area were received after publication of the Draft EIS; therefore, reference to those plans was not included in the document. The land use conflict between the Latenser Plan storage reservoir and the equestrian area is a significant impact and is acknowledged in this Final EIS. Current plans do not include implementation of the Latenser Plan, so the land use conflict should be avoided.



Spokane Regional Planning Conference

March 12, 1979

Mr. Roger K. Mochnick, M/S 443
201 EIS Coordinator
U. S. Environmental Protection Agency
Region X
1200 Sixth Avenue
Seattle, WA. 98101

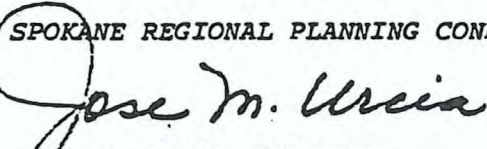
Dear Mr. Mochnick:

Please find comments attached received from the Transportation Study Division of the Conference commencing review of the draft Environmental Impact Statement, "City of Spokane Combined Sewer Overflow Abatement Project." I believe the comments to be self-explanatory.

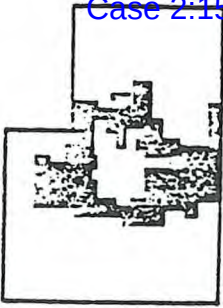
Thank you for the opportunity to review this statement.

Sincerely yours,

SPOKANE REGIONAL PLANNING CONFERENCE


Jose M. Urcia, Director
JMU:11
Enc. (1)

cc: Robert Vaughan



Spokane Regional Planning Conference

TRANSPORTATION STUDY DIVISION

Phone 509-456-4325

March 6, 1979

Mr. Jose M. Urcia
Conference Director
Room 353 City Hall
Spokane, Washington 99201

Dear Mr. Urcia:

The Conference Transportation Study has reviewed the draft Environmental Impact Statement, titled "City of Spokane Combined Sewer Overflow Abatement Project". Our review comments are related to transportation and air quality planning.

This document describes seven major alternatives to abate the combined sewer overflows at over 30 points in the City of Spokane. At the present time, the trunk sewer system is unable to transport all of the sanitary waste water and storm runoff to the sewage treatment plant.

These alternatives are:

1. Build 14 underground storage basins.
2. Build 14 small underground treatment plants.
3. Construct a storm sewer system of 220 miles to separate sanitary waste water from storm runoff.
4. Klicket Plan of smaller underground storage basins with surface lagoons.
5. Latenser Plan of a large open storage reservoir in Riverside State Park where storm water is held for later treatment. Effluent from the Spokane sewer treatment plant would be discharged into the Crab Creek drainage basin.
6. Use a combination of 1 and 3.
7. No action

None of the alternatives will significantly affect ambient air quality nor interfere with the air quality implementation plan control strategies. During construction, temporary dust problems may be a problem in select areas; proper measures to hold dust down should be utilized.

It appears from this document that proposal number 3 may be the selected alternative. Alternative Number 3 will, during construction over an 8 to 10 year period, affect up to 220 miles of city streets. Most of the major arterials will be influenced by construction, either in the arterial right of way or by crossing the arterial. A number of major central business district streets will be affected such as Riverside, Sprague, Lincoln, Monroe, Spokane Falls Blvd. and First.

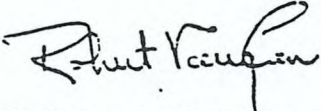
Mr. Jose M. Urcia

March 6, 1979

Page 2

Some of the construction impact on traffic should be able to be reduced by avoiding having the routes closed during peak hours. The impact in the central business district could probably be reduced by construction periods operating 24 hours a day, thus shortening the time the streets will be torn up.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Robert Vaughan". The signature is fluid and cursive, with a large initial "R" and a stylized "V".

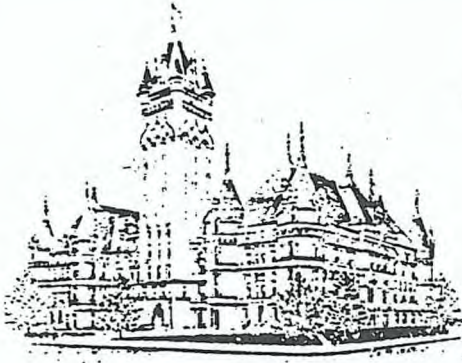
Robert A. Vaughan, P.E.
Transportation Study Director

RAV/em

Spokane Regional Planning Conference

1. It is imperative that nuisance dust be kept to a minimum along pipeline construction corridors, especially in residential areas. The city should ensure that frequent watering of disturbed areas and compaction and resurfacing of completed pipeline routes be a requirement of the construction contract.

2. Mitigation of other construction-related impacts are discussed on pages 75 to 89 of the Draft EIS. Maintaining through-access on roads in construction zones is desirable, but 24-hour construction periods would probably violate the Washington Environmental Noise Control Ordinance. It restricts construction noise between 10:00 p.m. and 7:00 a.m.



SPOKANE COUNTY COURT HOUSE

SPOKANE COUNTY

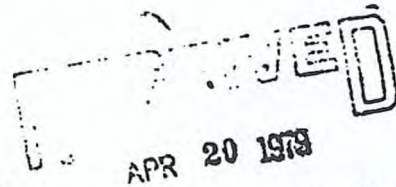
OFFICE OF
COUNTY ENGINEER

ROBERT S. TURNER
COUNTY ENGINEER

SPOKANE, WASHINGTON 99201

April 18, 1979

Roger K. Mochnick M/S 443
201 EIS Coordinator
U.S. Environmental Protection Agency, Region X
1200 Sixth Avenue
Seattle, WA 98101



SUBJECT: EIS - City of Spokane
CSO Project

Dear Sir:

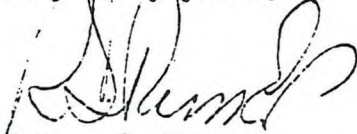
The project being reviewed is the "City of Spokane Combined Sewer Overflow Abatement Project" and is properly titled being a project intended to stop overflow at the points of interception. The EIS deals with the project as if it were a project to accomplish complete separation of sanitary and storm waste waters. In actual fact, the project proposes to reduce, not eliminate, storm waters from the combined system. Overflows can be stopped at the point of interception, but storm and other non-sanitary sewage flows will continue to flow through the system and to reach the central plant. This failure to recognize the difference between overflow abatement and separation most directly affects the EIS discussion of regionalization. These discussions assume that completion of phases 1 & 2 of Alternative 3 will effect complete separation, thus providing interceptor and plant capacity to accommodate extra-City flows. This is an erroneous assumption. Major additional expenditures beyond those projected for phases 1 & 2 would be necessary to accomplish the necessary degree of separation to achieve the results assumed; in fact, achieving full separation as the EIS seems to assume may well be an impossible task.

The writers and reviewers of the EIS statement are referred to Appendix A of the North Spokane Facilities Plan which addresses the subject in considerable detail. This Facilities Plan also points out that there are ways to connect North Spokane to the city treatment plant without waiting for the complete separation as is inferred by the CSO-EIS, although this will involve giving priority for full treatment to the North Spokane flow.

Roger Mochnick
April 18, 1979
Page 2

These comments are not intended to be negative to the proposed City project. The project is honestly titled and would accomplish the intention of stopping overflows. There is, however, a general misconception abroad that the project will go beyond this to accomplish full separation. The EIS report had an opportunity, perhaps even an obligation, to correct this misconception and did not.

Very truly yours,

A handwritten signature in dark ink, appearing to read 'R. S. Turner', written over a horizontal line.

Robert S. Turner
County Engineer

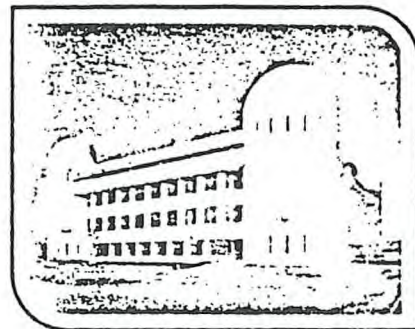
Spokane County Engineers

1. These comments have been considered in preparing the general response entitled Wastewater Regionalization at the Spokane Treatment Plant (Chapter 3).

Spokane County
Health District

West 1101 College Avenue Spokane, Washington 99201

March 29, 1979



RECEIVED

APR 5 1979

EPA-EIS

Roger K. Mochnick, '201' EIS Coordinator
U.S. Environmental Protection Agency, Region X
1200 Sixth Avenue, Mail Stop 443
Seattle, Washington 98101

Dear Mr. Mochnick:

The Spokane County Health District has reviewed the EIS "Draft" for the City of Spokane combined sewer overflow abatement project. Transmitted herein are our comments:

1. It is of interest that in the Goals and Constraints Section, it is stated, "The DOE must insure that the selected project is capable of complying with the city's NPDES permit, which calls for eventual elimination of all CSO to the river." Also, in the Necessity for and Purpose of the Environmental Impact Statement, it is stated, "In the selection of a combined sewer overflow abatement plan, it is the intent of NEPA that alternatives be evaluated and a plan be selected on the basis of all environmental considerations, not just monetary costs." The authors proceed, primarily due to monetary costs, to recommend Alternative 3, which does not remove all CSO, and does not efficiently remove effects on the river.
2. On page 9, it is stated, "Only the Latenser Plan would be likely to create significant improvement in water quality in the Spokane River and Long Lake."
3. On page 10, Alternative 3 is said to be able to improve groundwater quality condition in the Spokane Valley - Rathdrum Prairie Aquifer indirectly by allowing eventual sewerage of Spokane Valley residences, and this could eliminate "septic tank contamination" of this sole-source aquifer. Some observations are in order here:
 - a. No study we are aware of has shown "septic tank contamination" of the aquifer. (Perhaps you mean on-site sewage disposal, not septic tanks.) On the other hand, the current '208' study, as well as other data, show increased population and man's activities increase pollution. As such, sewerage the valley will encourage more population and hence more pollution.
 - b. Adding more sewage to the STP will add more pollution to the river.
 - c. The additional capacity needed at the STP to handle the total valley sewage will take further monetary investment.
4. On page 10, it is stated, "The Klicker sub-option would best remedy the overflow health hazard by eliminating all overflows." This is in opposition to selection of Alternative 3.

Administration
Clinic

456-3630
456-3640

Personal Health
Viral Screenings

456-3613
456-3670

Environmental Health
Laboratory

456-6040
456-3667

March 29, 1979
 Roger K. Mochnick
 Page 2

5. On page 10, it is stated, "Health hazards and aesthetic problems associated with sewer backups would be most effectively eliminated by new storm sewers (Alternative 3)."
6. On page 13, it states that Alternative 3 would reduce energy consumption.
7. Alternative 3 would create a large savings in chemicals.
8. On page 17, the Latenser Plan would allow abandonment of the alum and ferric chloride use, a net savings of \$452,700 annually.
9. On page 19, it is stated, "... a first step in efforts to make the Spokane plant a regional treatment plant, a regionalization which would produce a substantial cost savings for wastewater treatment for the Spokane Valley ...". This statement is in direct opposition to data prepared by URS as part of the '208' study. The URS study shows essentially the same cost to use the STP as to use the new treatment facility.
10. The discussion on page 31 explaining why only 15 basins and not 24 would be utilized in the recommended Alternative 3 indicates the CSO would not be solved by this plan while it could be by both the Klicker and Latenser Plans.

The above are enough items to support our conclusions. We believe that, contrary to the stated goals and intent, the recommendation to use Alternative 3 is strictly based on monetary consideration. We believe the Latenser Plan has far and above, the most environmentally sound advantages. The difficulties of reuse of water and export to Crab Creek are real, but not insurmountable. In fact, this idea is being explored by EPA as "THE" method of waste disposal for the future. If the benefits of reuse of the water and added nutrients for crops and cleanup of the river are adequately evaluated, we believe this is the alternative of choice.

Even considering monetary effect, let's compare:

(The city population is 182,000 or based on 3.2 people per home, approximately 55,000 residences.)

ALTERNATIVE 3: Construction cost - \$ 64,050,000 O&M - \$152,930

LATENSER PLAN: Construction cost - \$105,645,400 O&M - \$587,900*

*However, this eliminates \$452,700 of now expended funds on alum and ferric chloride.

A comparison cost to John Doe Citizen for "NO" financial assistance from anyone:

a. Construction cost spread over 10 years

ALTERNATIVE 3-per person	- \$ 352.00 total	= \$ 35.20 per year	= \$ 2.93 per month
per residence	- \$1165.00 total	= \$116.50 per year	= \$ 9.71 per month
LATENSER PLAN-per person	- \$ 580.00 total	= \$ 58.00 per year	= \$ 4.83 per month
per residence	- \$1921.00 total	= \$192.10 per year	= \$16.00 per month

b. O&M cost

ALTERNATIVE 3-per person	-	= \$.84 per year	= \$.07 per month
per residence	-	= \$ 2.78 per year	= \$.23 per month
LATENSER PLAN-per person	-	= \$ 3.23 per year	= \$.27 per month
per residence	-	= \$ 10.61 per year	= \$.88 per month

March 29, 1979
Roger K. Mochnick
Page 3

- 8
- c. O&M reduction by saved chemical
 - LATENSER PLAN - per person - = \$.74 per year = \$.6425 per month
 - per residence - = \$ 2.46 per year = \$.205 per month
 - d. Total unaided cost per residence for 10 years equals
 - ALTERNATIVE 3 = \$ 9.94 per month
 - LATENSER PLAN = \$16.38 per month
 - LATENSER, LOWER O&M = \$16.20 per month

Considering the overall benefits from this and the possibility of revenue from the reuse of the water, the Latenser Plan would rank best from our viewpoint.

Sincerely,

ENVIRONMENTAL HEALTH DIVISION



Edward M. Pickett, R.S., M.P.H.
Director of Environmental Health

cmf

Spokane County Health District

1. Alternative 3 is planned to make a significant reduction in CSOs, which create a health hazard in the Spokane River. This does not include stormwater overflows, just CSOs. Selection of a staged Alternative 3 as the recommended action was not made "primarily due to monetary costs". Several of the alternatives were lower in cost (see pages 14 and 15 in the Draft EIS). Alternative 3 provides a viable means of reducing CSOs (a health problem in the Spokane River) and eventually sewerage areas over the Spokane Valley aquifer that now use on-site disposal systems (a public health threat to Spokane's sole source of domestic water).
2. The water quality discussion on page 9 refers to chemical quality only. Changes in bacterial and other pathogenic organism contamination of the river is discussed on page 10 as a public health consideration.
3. Use of the term "septic tank" was inappropriate; "on-site sewage disposal" more properly describes the various wastewater disposal systems that are used by individual dwelling units or commercial/industrial developments that are not part of a central sewage collection system. The recently released Spokane Aquifer Cause and Effect Report (Esvelt, 1978) concludes that "there is a risk of bacteriological degradation of the aquifer which accompanies current and future development over and adjacent to the aquifer. The risk of contamination will increase with additional population growth". This indicates that present wastewater disposal practices over the aquifer are a threat to aquifer water quality. Most wastewater disposed of over the aquifer is passed through on-site systems.

It is agreed that continued development over the aquifer increases the risk of aquifer contamination; this will be especially true if on-site systems continue to be the main form of wastewater treatment and disposal. Construction of sewers may stimulate additional development, but in the absence of sewers, the use of on-site systems proliferates.

Wastewater reaching the Spokane River from the Spokane plant has been treated to remove contaminants; wastewater reaching the aquifer from on-site disposal systems has only been filtered by the soil mantle.

4. The Klicker Plan would best eliminate the CSO-related health hazard in the Spokane River, but it is not capable of adequately meeting the other two project objectives - controlling sewer backup and flooding problems, and maintaining the option of using the Spokane plant as a regional wastewater facility. Alternative 3 could accomplish these objectives and would only be slightly less effective at reducing health hazards in the Spokane River.

5. No response required.

6. The financial comparison of regionalization and construction of a new wastewater treatment plant in Spokane Valley utilized data in the U. S. Department of Army, Corps of Engineers (1976) Metropolitan Spokane study and treatment plant construction costs taken from EPA cost curves (U. S. Environmental Protection Agency, 1978). The recently-prepared URS data were not available at the time the Draft EIS was being compiled. It is not known whether the URS comparison was developed using the same treatment plant size and treatment level assumptions used to prepare the costs in Table 5-2 of the Draft EIS.

7. Alternative 3 does not include use of storage basins. The discussion on page 31 relates to storage and satellite treatment alternatives only.

8. The numbers are essentially correct for the approach utilized. However, an error is evident in the \$16.20 per month figure for "Latenser, Lower O&M". This number should actually be \$16.67 per month using the numbers contained in the County Health District letter.

An approach which would more accurately reflect the actual costs involved would be to amortize the capital cost, an approach which would take into account interest charges. Amortizing capital costs over a 10-year period at 8 percent would make the "total unaided cost per residence for 10 years" as follows:

Alternative 3	= \$14.69 per month
Latenser Plan	= \$24.74 per month
Latenser, Lower O&M	= \$24.53 per month

Thus, when interest charges are included in the calculations, the Latenser Plan is less favorable than shown in the County Health District letter.



DEPARTMENT OF PUBLIC WORKS & UTILITIES

GLEN A. YAKE, P.E.
ASSISTANT CITY MANAGER - ENGINEERING

ROGER JAMES, P.E.
DIRECTOR OF PUBLIC UTILITIES

April 17, 1979

U.S. Environmental Protection Agency
1200 Sixth Avenue M/S 443
Seattle, Washington 98101

Ladies and Gentlemen:

Following receipt of the Draft Environmental Impact Statement on the City of Spokane Combined Sewer Overflow Project, we sent copies of it to a number of interested local agencies in the City of Spokane for their review and comments. It was our hope that we could take the comments and consolidate them into an overall City comment, however, due to the critical involvement of key City personnel in important legal matters and court appearances it has not been possible for us to effect this consolidation. Instead we will send you the material which we have collected and hope that you have an opportunity to read it and incorporate it into the final draft.

Very truly yours,

Roger James, P.E.
Director Public Utilities

RJ:ajg

Encl.

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APR 18 1979

EPA-FIS

CC & in file

M E M O R A N D U M

March 16, 1979

TO: Roger James, Director of Public Utilities

FROM: Victor G. Cole, Manager - Finance *VGC*

SUBJECT: Draft Environmental Impact Statement - Combined
Sewer Overflow Abatement Project

1 I have been examining the Draft Environmental Impact Statement for the Combined Sewer Overflow Abatement Project and find that the cost alternates probably should be updated prior to final adoption.

Some of the material is out of date, 1977 cost figures having been used. Some of the material apparently may have been developed without a full understanding of certain of the property tax laws. The table on the limitation of indebtedness, for example, is one that should be brought up to date to more correctly reflect the City's financial position. The alternatives of property tax values have not given consideration to increased valuation, changes in millage levies, and the effect of the 106% lid law.

2 The study mentions a combined water-sewer-refuse-utility tax of 6%, when, in fact, the sewer utility tax is 9.3%. The impact of tax rates is not understood by this office because the assumptions built into the construction of the impact tables do not appear to be sufficiently explained. It is the conclusion of this office that, while the differences may not be substantial to the overall conclusions, readers of this environmental impact statements are likely to arrive at erroneous opinions as to the ability of the City to finance the project.

If the Environmental Protection Agency should agree that revisions ought to be made and is willing to send its people to Spokane for the two or three days that might be necessary to make the suggested revisions, this office would be quite willing to set aside the time to work with the EPA representatives accordingly.

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MAR 19 1979

Dept. of PUBLIC UTILITIES

City of Spokane Finance Department

1. The estimated user charge increases and ad valorem taxation increases presented on pages 142 to 154 of the Draft EIS were prepared to indicate the general range of increases that might be expected as a result of the alternatives. The analysis was not intended to present exact data; it sought mainly to show relative differences between alternatives for comparative purposes. An update of the city's financial position is not deemed necessary for this alternatives comparison. We concur that the figures used are now out of date.

The user cost and ad valorem taxation estimates adequately illustrated the magnitude of the potential financial impact of Spokane sewer system users. It is believed that the magnitude of the anticipated user cost increases included in the Draft EIS are well within the level of accuracy expected from facilities planning. The specific means of collecting local funds and allocating local costs are to be determined by the city. Early indications were that the city would pay local costs through adjustments in user charges.

2. Reference to a 6 percent sewer user tax should be modified to reflect the current 9.3 percent sewer utility tax. The important point is that this tax was not included in estimates of sewer user charge increases that might result from the various alternatives (Table 4-15, page 151 of the Draft EIS).

In order to develop the estimated ad valorem tax increases, the local equivalent annual cost of each alternative was evenly distributed to all property in the city; a total assessed valuation of \$1,835,660,452 was assumed. An estimated increase per \$1,000 of assessed value was calculated. These estimated rate increases were then applied to several typical properties (one residential and one industrial) to indicate the magnitude of the annual increase in a typical tax bill that the tax rate increases would generate.

INTER-OFFICE MEMO

April 2, 1979

TO: John Swanson - Director Public Works

FROM: Brad Blegen - Construction Engineer

SUBJECT: Overflow Study Environmental Impact Statement (EIS) Comments

I have reviewed the EIS and have concluded that it is a very well written document. The author(s) seem to have an excellent understanding of the information presented in our report and also an excellent understanding of our sewer and treatment systems. I think the EIS presents a favorable outlook towards our proposed storm sewer solution for solving overflows and will be a very helpful document for the City in proceeding with the program. I feel the information presented in the EIS is factual with no significant errors detected.

From our standpoint probably the most important pages in the report are 184, 185 & 186. Table 5-1 indicates that our proposed storm sewer (multi purpose) project (\$6.81 million) is only slightly more costly than the proposed EPA storage basin (1 overflow/year) project when a credit is given for regionalization (\$6.18 million). The reason the credit calculated in the EIS is larger than what we calculated earlier in our report is because of new Valley STP costs available to the authors of the EIS. Apparently we will be funded (75% Fed. & 15% State) for Phase 1, and I believe these new cost figures indicate that we should rightfully be eligible for substantial amounts of state and federal funding assistance for Phase 2 if a regionalized approach is pursued. The EIS indicates that Phase 2 funding is too far in the future to be committed now. Phase 2 funding will probably not be resolved until a Valley sewage plan is developed.

One point I thought was interesting is on page 13 it is stated that the storm sewer alternate (Alternate 3) would provide annual cost savings to the City for electricity (\$65,835) and chemicals (\$132,600). If these savings were really realized they would more than offset O&M costs on the storm sewer system.

In conclusion probably the most important point made on the EIS is that construction of Phase 1 storm sewers solves 84% of the overflow problems for 39% of the total cost involved. It is a major step for solving many backup and drainage problems and is the first step for regionalization of the Spokane Metro area sewage system. Future funding of Phase 2 will depend on results of more in depth regionalization studies.

/s/Brad

City of Spokane Department of Public Works

1. No response required.



CITY PLAN COMMISSION
309 City Hall
RICHARD H. BARRETT, President
VAUGHN P. CALL, A.I.P.
Manager - Planning
E. T. CLEGG, A.I.P.
Planning Director

March 8, 1979

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MAR 12 1979

Mr. Roger K. Mochnick, N/S 443
201 EIS Coordinator
U.S. Environmental Protection
Agency, Region X
1200 Sixth Avenue
Seattle, WA 98101

ENVIRONMENTAL EVALUATION
BRANCH

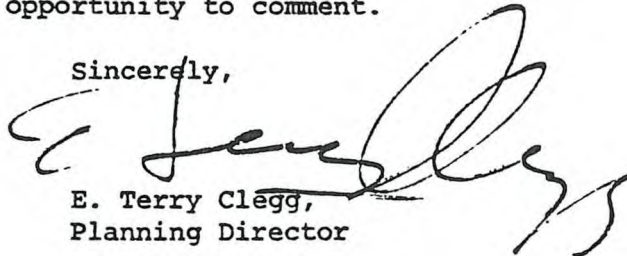
Dear Mr. Mochnick:

RE: EIS, City of Spokane Combined Sewer Overflow
Abatement Project

We have reviewed the above Environmental Impact State-
ment and find it has fully discussed this project.

Thank you for the opportunity to comment.

Sincerely,


E. Terry Clegg,
Planning Director

ETC:GOZ:elt

City of Spokane Plan Commission

1. No response required.



DEPARTMENT OF PUBLIC WORKS & UTILITIES
GLEN A. YAKE, P.E.
ASSISTANT CITY MANAGER - ENGINEERING

ROGER JAMES, P.E.
DIRECTOR OF PUBLIC UTILITIES

April 3, 1979

M E M O R A N D U M

To: Glen A. Yake - Manager-Engineering
From: Roger James - Director Public Utilities *RJ*
Subject: EIS on the Combined Overflow Abatement Project

These are my notes after reviewing this project.

1 | Page 1, first paragraph, I do not interpret the NDDDES permit as did the author. The City is simply not in violation of its waste discharge permit at this time.

2 | Page 5, fourth paragraph, we find a number of descriptive locations in the report which we have difficulty locating. For example, "Bridge Street", "East Town", Riverton Street", "Cedar Street Fire Station", "Spokane Branch Library", and "Rockwood Park Clinic". One can guess what the author means, but certainly with no degree of certainty.

3 | Page 20, first paragraph, once again how does one say something, we fail to see the reasoning behind the statement that we cannot accept any sewage from outside the City until Phase II of the CSO program is completed. We think that the truthfulness of this statement depends entirely on the assumptions made and that these assumptions should be stated.

4 | Page 39, third paragraph, Mr. Latenser always claimed that the trunk sewer in Jackson and Cleveland Ave, that is the big fifth ward sewer, was underloaded. I suppose that if one says this enough times some people will believe that to be true, nevertheless, we must state that it is a totally false statement.

5 | Page 51, second paragraph, we believe that this discussion is misleading, the EPA guidelines provide for determining the most cost-effective solution by an arbitrary means which cannot and should not be compared with costs shown in the Facility Plan. It seems to us that what the EPA sees fit to label a multipurpose plan is actually a multiple effect plan in which a system designed to correct the overflow problem just coincidentally also corrects certain other situations.

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EPA-FIS

6 Page 98, first paragraph, first let us correct a few facts. The City began to dump sewage into the river in 1890. Its studies relating to sewage treatment commenced in 1913. The City has been actively pushing ahead since that time.

We believe that the Long Lake Dam was one of the last ones on the river to be built. However, most dams have undergone extensive rebuilding in recent years.

We believe that the amount of water removed from the river for irrigation or other beneficial use has actually decreased markedly in recent years.

While State and Federal agencies are Johnny-come-latelys in this area the City has been an active party in trying to clean up the river for over 60 years. Four times the City went to the voters and four times, because of active opposition by the media and lackluster support from the State, the issues were overwhelmingly defeated. The City was successful in attempt number five in 1946 and has pursued the program quite vigorously since that time.

7 Page 188, Table 5-3, the understanding left with the City by Senator Magnuson was that 75% federal funding, and 15% state funding, would be available for Phase I of this project. Following completion of Phase I a period of testing would ensue. If necessary all or portions of Phase II would follow utilizing whatever federal and state funds were then available.

It is the City's position that the material on page 188, lower one half of the page, could be interpreted to mean that the City has agreed to proceed with Phase II even if no federal and state funds are available. This is definitely not the City's understanding.

8 Page 149, fifth paragraph, and page 152, first paragraph, we categorically reject the statements herein contained.

The City is under orders from the DOE and through them from EPA to act on the storm sewer program. The required increases in sewer rates and/or tax rates are imminent, they could easily occur this year.

On the other hand local groups such as the 208 Committee have not even concluded. As of now that sewerage in the valley is necessary, the 208 report will be out in May 1979 and of course will be subject to final hearings.

Insofar as the Spokane Valley is concerned we know of no funds to even officially study this area. Any project is, in our opinion, far enough down the line to allow an industry to build a plant in the valley and amortize it before sewer costs would be forthcoming.

This seems to us like a deliberate attempt to mislead.

9

Page 38, a number of pages following page 38 discuss in some detail financing abilities of the City of Spokane particularly as they relate to the ability of the City to proceed without the availability of federal and state grants.

We have asked Mr. Cole to comment on these pages since we feel they are based entirely on old figures and on interpretations of state law which are contrary to our general understanding of the state laws. We believe that the entire pages should be either totally redone or that they should simply be labeled as inaccurate and therefore of no value to anyone who studies the report. We believe that Mr. Cole's report will reinforce this opinion.

I think these are pretty much the ideas which I have come forward with, I have asked other people in the City to study certain sections of this report and hope to have reports from them before the day (April 3) is over.

RJ:ajg



GLEN A. YAKE, P.E.
 ASSISTANT CITY MANAGER - ENGINEERING

ROGER JAMES, P.E.
 DIRECTOR OF PUBLIC UTILITIES

April 17, 1979

MEMORANDUM

To: Glen A. Yake - Manager-Engineering
 From: Roger James - Director Public Utilities *Roger James*
 Subject: Further Comments on the Environmental Impact Statement (EIS)
 on Combined Overflow Abatement Project

10 Since the publication of the EIS the City has on a number of occasions been advised that the report states that the City system will not handle flows from the County without increasing the overflow to the river. The statements seem to indicate that this will be true until both Phase I and Phase II of the project are completed. We fail to find this statement in the EIS, but in view of its persistence feel that it is necessary for us to comment upon it.

The City studies show:

1. The entire North Spokane area can be discharged to the Hollywood system without increasing the volume of overflow to the Spokane River.
2. Considerable sewage from North Spokane could be added to the Cochran Avenue system without increased overflows. The extent to which this can be done depends upon exactly how it is designed and constructed. The theory behind this statement is that if the material could be discharged to an existing facility, such as the Lidgerwood Lagoon, it could then be pumped into the City system during dry weather periods and at off peak hours.

We believe that the following statement pretty well covers the position regarding sewer service East of the City:

"If we can assume the following:

A. The sewers in the Southwest portion of the City are separated (this is the area South of the River and generally East of Perry Street).

B. All sanitary sewage from this area and from the Spokane Valley is transported to either Mallon and Perry or Trent and Erie.

C. Phase I of the Spokane Combined Sewer Overflow Project is completed.

10 D. The North Spokane area is sewerred and connected as outlined under either 1 or 2 above."

It is our feeling that if the conditions listed herein are met, overflows to the river will not increase during the period that the rest of the Phase II Project is being completed.

RJ:ajg

City of Spokane Public Utilities

1. Recent discussions with Mr. Claude Sappington of DOE indicate that Spokane is in technical violation of its waste discharge permit because the CSO abatement project schedule stipulated in the latest modification to the permit has not been met. A new schedule for compliance will be developed once the EIS process is completed.
2. No response required.
3. This comment has been considered in preparing the general response entitled Wastewater Regionalization at the Spokane Treatment Plant (Chapter 3).
4. No response required, as the Latenser Plan is no longer being considered.
5. EPA guidelines and program management memoranda have been developed to assist in allocation of federal funds to local public works projects. The cost comparison and cost allocation methodology of PRM 75-34 and PRM 77-4 are intended to clearly indicate the most economic means of achieving the legal mandates of the federal Clean Water Act. The act requires control and eventual elimination of discharge of pollutants to the nation's waterways. All local plans to achieve this goal must be compared with the least-cost means of achieving the goal. In Spokane's case the most inexpensive means of controlling the pollution (CSOs) would be construction of storage basins sized for the 1-year frequency storm. The proposed action (Alternative 3) is more expensive than this storage option and seeks to solve more than just the CSO problem with the extra expense. In order to comply with its guidelines, EPA must assign this extra expense to the local entity, thereby reserving federal funds for just the water pollution control purpose they were originally allocated.
6. The comments are acknowledged and incorporated into the Final EIS.
7. All decisions on the nature of and funding for Phase 2 will be made after Phase 1 results are analyzed. DOE will have primary responsibility for determining Phase 2 requirements.
8. The information on pages 149 and 152 is not intended to be misleading. It simply provides a rough estimate of the effects of allocating local share project cost on a property tax (ad valorem tax) basis. The exact means of distributing the increased local costs would be left up to the city. If payment through property taxation is not desirable, user charges or some other procedure may be used. The ad valorem taxation figures simply provide a second means of comparing the various alternatives. EPA requires only that the cost allocation be equitable.

Spokane County is seeking to study wastewater treatment possibilities in the Spokane Valley area through a regional 201 planning effort. Application has been made for a grant to fund this planning; a grant award is expected in July.

9. Refer to the Spokane City Finance Department letter for responses to these comments.

10. These comments have been considered in preparing the general response entitled Wastewater Regionalization at the Spokane Treatment Plant (Chapter 3).

April 4, 1979

M E M O R A N D U M

TO: Roger James, Director Public Utilities
FROM B. J. Schmitz, Traffic Engineering Director
SUBJECT: ENVIRONMENTAL IMPACT STATEMENT CITY OF SPOKANE
COMBINED SEWER OVERFLOW ABATEMENT PROJECT

We have reviewed the E.I.S. for the Combined Sewer Overflow Abatement Project and are very concerned with the effect that construction of recommended Alternate 3 will have upon vehicle travel.

This Department will be intensely interested in having input during design stages in order to avoid proposals that would create critical traffic conditions during construction.


Traffic Engineering Director

bjs mrs

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Dept. of PUBLIC UTILITIES

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City of Spokane Traffic Engineering Department

1. Because the proposed action will be constructed under the direction of the city, it is assumed that the Public Utilities and Traffic Engineering Departments will consult on traffic control problems. Every effort should be made to minimize serious traffic safety hazards and traffic disruptions. Several potential mitigation measures have been suggested in the text of the Draft EIS (page 89); these and other mitigations should be thoroughly explored prior to start of construction.



BOVAY ENGINEERS, INC.

HOUSTON • SPOKANE • BATON ROUGE
AUSTIN • ALBUQUERQUE • WASHINGTON, D. C.

April 3, 1979

Mr. Roger James, P.E.
Director of Public Utilities
North 221 Wall Street
Spokane, Washington 99201

Re: CSO Abatement EIS Comments

Dear Mr. James:

We have examined the final draft Environmental Impact Statement for the Sewer Overflow Abatement project and enclose our initial comments for your review. We will continue to review the document and keep you informed of any additional comments we feel are significant. Please feel free to include any of the notes in your written comments being submitted to EPA.

Sincerely,

BOVAY ENGINEERS, INC.


Robert E. Smith, P.E.

RES:er

Enclosure

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APR 3 1979

Dept. of PUBLIC UTILITIES

COMMENTS ON DRAFT ENVIRONMENTAL IMPACT STATEMENT

PREPARED FOR

CITY OF SPOKANE

COMBINED SEWER OVERFLOW ABATEMENT PROJECT

1 | Pages 1 and 2 - It seems to be a gray area whether or not the City is in violation of its NPDES permit as evidenced by the conflicting statements 1) The City's NPDES permit specified cleanup of all CSO's by June 30, 1977 (is this true?) and 2) "... NPDES permit, which calls for eventual elimination of all CSO to the river."

2 | Page 5 - Easttown? Should this be Northtown?

Page 6, Table 1-1 - Easttown? Same as for comment on page 5.

3 | Page 7 - "construction is planned for most of the major streets in the downtown area." Is this true? Figure 4-2 shows less than 50 percent.

Chapter 1

4 | Page 9 - There seems to be conflicting data in the report to support the statement, "Suspended solids loading would be increased by over 160 percent due to direct discharge of stormwater runoff."

5 | Page 10 - States that the Klicker suboption would best remedy the overflow health hazard by eliminating all overflows. No plan will eliminate all overflows because the overflow depends upon the intensity of the storm and no basin can be designed to handle the maximum possible storm.

6 | Page 12 - Alternative 3 would eliminate sanitary wastewater related debris.

7 | Page 13 - The costs for chemical savings and for additional costs is probably off by a factor of 2 because of recent and anticipated price increases. The statement that Alternative 3 would create a large savings in chemicals is definitely correct.

8 | Page 16, Table 1-6 - Why does storage under Alternative No. 1 and storage under the Klicker Plan have such a wide variance, i.e., \$94.10 vs. \$30.38?

9 | Page 19 - The last paragraph says Phase I would eliminate 84 percent of Spokane's CSO but would probably not result in discernible change in Spokane River water quality. However, the same paragraph says that Phase I would eliminate the two largest sources of untreated wastewater discharge. How can water quality not improve if this is true? This conflicts with page 29 which says, "The constituents

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Dept. of PUBLIC UTILITIES

1 in the CSO which are of particular importance are pathogenic organisms and solid materials of sewage origin."

10 Would like to see backup data that says Phase 2 is absolutely necessary to function as a regional facility.

11 The total construction cost in the report for Phase 1, \$24,980,000 is low.

2 Is the statement correct that the north central and southern region would not be relieved of the sewer backup problems, and that those areas are the most severe?

3 Page 20 - Is it correct that separation in the Hollywood and Cochran areas will not allow annexation of flows from north Spokane?

Stormwater Overflows - Chapter 2

4 Page 24 - Average daily flow for 1978 was 36.2 MGD.

5 Page 34 - The second paragraph is incorrect. The re-evaluation by the City did not result in a decision to size basins for one overflow per year. The one overflow per year criteria was dictated by the EPA.

6 We have not seen any discussion of future energy costs for pumping all the stored water

7 Page 36 - Further review of O&M costs will show that the estimated annual O&M costs for all alternatives is greater than the O&M costs for separation. It therefore becomes apparent that with excessive inflation in power and chemical costs that the City is being asked to fund an ever increasing O&M burden.

8 Page 37 - On the satellite treatment plants there is absolutely no guarantee that future regulations will not require secondary treatment. In every case there will not be land available. However, in the case of Cochran (Meenach) and Hollywood storm separation, there would be space available for primary treatment of stormwater.

9 Page 41 - Is the Fort Wright Bridge structurally sound enough to carry a 110-in pipe flowing full?

10 Page 60 to 63 - In most cases we are talking about acquisition of public/private land. This would be extremely difficult at best.

11 Page 67 to 72 - It is recognized that storm sewer construction will disrupt many areas; however, the overriding point is that it can be scheduled in such a manner that only one recreational area or one semipublic facility is impacted at a time. The report currently leads one to believe that streets around all parks would be torn up at the same time.

12 | Page 75 - Mitigation measures for construction impacts. This is a good discussion, i.e., the limiting of construction to two contiguous blocks, the appointing of a contractor's construction coordinator and the use of the off season when constructing facilities near parks and recreation areas. The preceding discussion which ends on page 90 concerning construction disruption seems to be objective and a good presentation of the subject.

Pages 92 and 93 - It appears that the report is based on the old generally accepted, 1/3, 1/3, 1/3 to determine labor payroll costs.

Page 94 - We concur with the emphasis on Garland Avenue.

23 | Page 101, Table 4-5 - Again we would like to see the assumptions, data, calculations, etc., supporting the 160 percent increase in suspended solids loads to the Spokane River. Table B-10 shows stormwater runoff S.S. at 138-207 mg/l based on analyses of stormwater by treatment plant staff. I think clarification is needed as to whether this is combined stormwater or stormwater runoff. Sanitary sewage S.S. are generally at least 70 mg/l yet we show a range in Table 2-1 of 20 - 210 mg/l for CSO suspended solids which is lower than either of its constituents. How can this be? Table B-10 is inconsistent with Table 2-1 for CSO suspended solids and BOD.

24 | Page 113 - Sediments from Hangman Creek and upstream areas would also mask the effect of CSO suspended solids at low flow periods.

25 | Page 138 - Note: Costs are based on 1978. We are already looking at 1980 costs or two years of escalation on the project.

26 | Page 145, Table 4-11 - Shows \$9.5 million available for indebtedness on Councilmanic Bonds. Since this statement was as of September 31, 1977, it does not include the pavilion.

27 | Page 154, Table 4-17 - As shown in several areas of the report separate storm sewers at \$190 is again much cheaper than any other alternative except No. 4, Klicker Storage Sub-option, at \$117.

28 | Page 156 - All the energy figures in the report are based on present costs and are not escalated. This should be noted whenever O&M costs are considered as increases in energy costs are projected to be quite significant over the next 20-50 years.

Page 157 - When discussing chemical costs it should be noted that the price of alum went up 50 percent last year and such increases in the future with all chemicals should be a significant concern.

29 | Page 160 - The draft by Kennedy Engineers suggesting that phosphorus removal units at the treatment plant cannot properly treat flows beyond 57 mgd without expansion may or may not be true. Conversion of stormwater clarifiers only to secondary clarifiers requires pump and piping modifications but not additional basins.

Chapter 5 - Proposed Action

9 | Page 182, Figure 5-1 - Note that the area between A and Maple, Rowan
and Garland is not proposed for storm sewer separation.

0 | Page 186, first paragraph - EIS implies allocation of Phase I costs
between Federal, State and local entities has been firmly established. This is
not necessarily true.

31 | Third paragraph - About 120 miles of storm sewer will be installed for
Phase I, not 90.

32 | Page 187, second paragraph - After Phase I, suspended solids loading
would increase 15 percent annually, compared to the total 163 percent for Phase
I and II. If Phase I removes 84 percent of the CSO, these SS percentages appear
to be inconsistent.

33 | Page 188 - States that downstream coliform concentrations would be
much lower with Alternative No. 3.

34 | Page 188, third paragraph - Is it true that there are much fewer sewer
backups in the Hollywood and Cochran drainages?

35 | Page 188, fourth paragraph - Last sentence is unnecessary as it is
restated in the footnote to Table 5-3.

Table 5-3 - Numbers are correct if 87.8 percent total eligibility is
correct.

36 | Page 189, O&M - Add to paragraph, "O&M costs for Alternative No. 3 are
substantially lower than any of the other alternatives."

37 | Page 190 - Talks about sewer rates wherein the only increase in user
charges would be that required to finance O&M and to raise the 10 percent share.
Depending upon the City's cash position and the present fund surplus, there may
not be a need to increase rates for the next ten years.

38 | Page 191 - Table 5-4 - Shows an increase in user charges and probably
can best be analyzed by the City accounting department.

39 | Pages 190-192 - Says Phase II must be implemented before significant
interceptor capacity is freed. Should have calculations and backup data in EIS
to support this as it is a significant item.

Chapter 6 - Affected Environment

40 | Page 201 - Near the bottom of the page it infers that chlorine discharged from the sewage treatment plant may be partially responsible for low summer concentrations of total coliforms.

41 | Page 204, Hangman Creek - Last sentence in the first paragraph is a questionable statement. Should say, "The small flows from this nutrient-rich stream may not significantly influence Spokane River quality." (or, eliminate sentence).

42 | Page 211, Table 6-5 - Gives some current and projected population figures. Increases for the City of Spokane average around 3 percent and those for the county average around 5 percent. The City's is about right, but the county looks low.

43 | Page 217 - States the largest single source of suspended particulates is unpaved roads. A lot of the roads on the northeast area could very well be paved under the storm sewer project.

44 | Page 219 - Starts the bibliography. Bovay Engineers is listed as completing the Report on Additions and Modifications in 1978. This is incorrect-- it's 1973.

45 | Page 220 - There are certainly a lot of reports, etc., prepared on the Spokane area and to date the only one thing that has been done is building the treatment plant.

46 | Page 227 - It is worthy to note that Ken Lauzen, Bob Kussman, Richard Thiel, and Norm Sievertson, the people who know something about the Spokane area, were evidently not contacted regarding this report.

47 | Page 240 - Shows significant impacts based for Alternative No. 3 because the streets will be torn up. Again, there are ways of minimizing the impacts.

Page 245 - Shows the storm sewer impacts on parks. In general they are significant but can be mitigated.

Page 247 - Construction activity on semipublic/public facilities. Same comment. These impacts can be minimized.

48 | Page 262, Footnote No. 7 - Seventy-five percent suspended solids removal for primary treatment sounds quite high. What is this number based on?

Bovay Engineering, Inc.

1. The city's original NPDES permit did require elimination of all CSOs by June 30, 1977. However, when this schedule could not be met, DOE issued several modifications to the permit schedule. These modifications state that DOE will not initiate enforcement action against Spokane for failure to achieve the June 30 clean-up deadline as long as they comply with new schedules included in the modification orders. The latest order (Docket No. DE 77-335, first amendment) required elimination of dry weather CSO from three discharge points by February 16, 1978, and full compliance with the treatment plant total phosphorus effluent limitation by February 1, 1978. The latest time schedule for full CSO control (Docket No. DE 77-833) required that plans and specifications for the Meenach and Hollywood CSO corrections be submitted no later than April 30, 1979. This schedule is under appeal by the city.
2. The Eastown commercial area is located on the southwest corner of Havana and Sprague at the city's eastern edge. The reference should not be to Northtown.
3. As indicated in Figure 4-2 of the Draft EIS, all downtown streets except Stevens and Howard will face some disruption from storm sewer construction. Some of the streets will only be crossed by the new pipelines, but this will nonetheless cause traffic delays and disruptions.
4. This comment is considered in the general response entitled Stormwater Treatment (Chapter 3).
5. The storage basins and surface lagoons planned in the Klicker Alternative were to be sized to accommodate stormwater flows in excess of those expected from the 25-year frequency storm. While it is true that a CSO could still occur, statistically it would be less than once every 25 years.
6. No response required.
7. The chemical costs were based on prices being paid by Spokane as of September 1978. They have undoubtedly increased since that date.
8. Alternative 1 (25-year storage) includes \$28.9 million of construction for relief sewers to correct sewer backup problems. This cost would be borne totally by the city and would therefore be reflected in user cost increases. The Klicker sewer backup control strategy (gate valves and on-site storage) would cost only \$1 million. As a result, the city's share of Alternative 1 construction cost would be \$36.2 million while its share of the Klicker Plan would be only \$6.9 million. This accounts for the extreme difference in user charges shown in Table 1-6 of the Draft EIS.

9. Throughout the Draft EIS, discussions of bacterial and viral contamination of the river and its public health implications have been separated from other water quality considerations (e.g., nutrients, suspended solids, BOD). The statement on page 19 of the Draft EIS refers to water quality exclusive of the pathogenic organism question. Data analyzed in the EIS indicate that CSOs contribute generally less than 1 percent of the river's load of nutrients and suspended solids; therefore, elimination of the estimated 84 percent of the CSO would probably have little effect on these water quality parameters. From a public health standpoint, however, the 84 percent CSO elimination (pathogenic organisms and solid materials of sewage origin) would be significant because of the reduced health risk.

10. This comment was considered in preparing the general response entitled Wastewater Regionalization at the Spokane Treatment Plant (Chapter 3).

11. The Phase 1 construction cost figures are based on data presented in the city's CSO facilities plan (Spokane City Department of Public Works, 1977), and utilized the same unit costs presented in that report. The facilities plan estimates were made in 1977, so may be slightly low due to inflation over the past 2 years.

12. The statement is consistent with backup location and severity information supplied by the Spokane City Department of Public Works.

13. This comment was considered in preparing the general response entitled Wastewater Regionalization at the Spokane Treatment Plant (Chapter 3).

14. The 39 MGD average daily flow estimate was based on data from January to June 1978.

15. It was not intended to indicate that the city concluded basins should be sized to allow one overflow per year. This was an EPA determination.

16. No energy cost estimates were made for pumping from storage in either the city or Klicker storage plans.

17. The proposed action is presently stormwater separation; therefore, the city is not being asked to fund an ever-increasing O&M burden.

18. No response required.

19. The structural integrity of the Fort Wright Bridge was not analyzed in the EIS; the Latenser Alternative is no longer being considered, so the question does not warrant further investigation.

20. The potential acquisition problems are recognized and have been considered in selecting the proposed action.
21. It is stated at numerous points in the report that Phase 1 construction would be spread over a 5-year period and that individual sites would be affected for only a 2- to 3-week period. There was no intent to indicate all parks would be affected simultaneously.
22. No response required.
23. These comments are responded to, in part, in the general response entitled Stormwater Treatment (Chapter 3). It has been verified that the data reported as stormwater quality was indeed obtained from stormwater (not CSO) measurements. Total suspended solids and BOD quality listed in Table 2-1 is transposed; BOD should be listed at 20-210 mg/l and total suspended solids should be 76-220 mg/l.
24. We concur with this assessment.
25. No response required.
26. Refer to the Spokane City Finance Department letter for response to this comment.
27. No response required.
28. Future increases in energy and chemical costs are acknowledged and have been considered in selecting the proposed action.
29. No attempt has been made to verify Kennedy Engineers suggestion. The phosphorus removal capability should be thoroughly investigated prior to any regionalization efforts that might result from sewer separation.
30. The funding allocation for Phase 1 has not been finalized, but it is felt that it will be very similar to that identified in the Draft EIS.
31. The revised estimate is acknowledged.
32. Phase 1 would reduce CSO by 84 percent, but total stormwater separation would increase direct stormwater runoff to the river by over 5 billion gallons per year. This accounts for the large increase in suspended solids loading to the river (see Tables B-10 and B-11 of the Draft EIS).
33. No response required.
34. This statement is supported by sewer backup location and frequency information supplied by the Spokane City Department of Public Works.

35. No response required.
36. The statement is accurate, but not needed in the Phase 1 impact analysis.
37. No response required.
38. See Spokane City Finance Department letter for additional comments on user charges.
39. This comment was considered in preparing the general response entitled Wastewater Regionalization at the Spokane Treatment Plant (Chapter 3).
40. There has been no field study to determine whether treatment plant chlorine residual is affecting downstream bacterial levels, but this possibility is suggested by the coliform sampling data presented in the metropolitan Spokane report (U. S. Department of Army, Corps of Engineers, 1976).
41. Qualifying the statement about Hangman Creek's influence on Spokane River water quality is probably warranted in light of the relatively limited data available on Hangman Creek quality.
42. The population projections presented in Table 6-5 were developed in 1975 by the Spokane City Plan Commission. It is possible that the county numbers are low when the rapid growth of the last 2 or 3 years is considered.
43. No response required.
44. The typographical error in the BIBLIOGRAPHY is acknowledged; the correct date is 1973.
45. No response required.
46. Ken Lauzen played a major role in compiling data for and preparing the Draft EIS; he is listed on page 227 under U. S. Environmental Protection Agency, Olympia, Washington.
47. No response required.
48. The suspended solids removal estimate is based on manufacturer's literature for the type of treatment used by the city in its cost estimates.

RECEIVED

APR 13 1979

FDA/ELR

April 10, 1979

Environmental Protection Agency
Seattle, Washington

Dear Sirs:

Evidently the City of Spokane can save substantial sums by building Phase I of the Storm Sewer project, then completing the rest of the Sewage Abatement project as outlined in the Klicker plan.

I request that you make an analysis of costs for such a combination.

Phase I in the North portion of the City will than handle 84% of sewage presently discharged. Klicker plan storage tanks and lagoons will handle 16%.

Costs of cleaning such storage should be reasonable. The concrete floors of storage should be sloped so that a "sprinkling system" will clean automatically. The "sprinklers" would throw a stream of water almost fire hose size, the water broken up slightly, and rotate very slowly. Nozzles similar to those used in the huge automatic irrigation systems that irrigate a 50 acre circle of land should be used.

If these were turned on while the last of the storm water was draining out there is little cleaning left to be done.

Of course the storage tanks can be designed so that lots of labor is necessary, but our projections should not be based on poorly designed storage.

This should not affect regionalization of sewage problems. The Valley can still be hooked on to the North Bluff intercost. It has a huge circumference and the slight additional flow should make comparatively small difference. Possibly it would be necessary to pump this line downhill during a storm. However this seems to be a most remote possibility, but the figures aren't presently available to me to quote.

It might be necessary to pump a small amount of this Valley sewage into the North Bluff intercost as there is an area East of Division St that will not gravity flow.

Obviously the piping and pumps necessary for regionalization are chargeable to future plans to hook up to our treatment plant. There is no reason for the City to pay extra now for our Sewage Abatement project. If they hook on, and this is still an open question, they should pay then.

As far as plant capacity is concerned it appears obvious that the plant can handle regionalization as storm volume will be only 16% of previous calculations. We should be able to trickle this in at night when flow is 30% to 40% under day time flow. This actually makes a more efficient operation than normal fluctuations.

Sincerely
Jake Klicker
Jake Klicker
for the people

Jake Klicker

1. Mr. Klicker has requested that costs be developed for a new alternative. This alternative would use storm sewers in certain areas in the northwest portion of the city, and the Klicker concept of covered and open storage basins to control CSO in the remainder of the city. Storm sewers would be constructed for drainage areas 12 and 15 (see Figure 1 in this report), which is the identical area for construction of the Phase 1 storm sewers in Alternative 3 of the Draft EIS. Construction of these storm sewers would eliminate the need for the large reservoir at Bridge Street proposed in the earlier Klicker Plan as well as pipelines to connect this large reservoir to existing interceptors. Other than these changes, this new alternative is identical to the Klicker Storage Suboption described on pages 34 to 36 of the Draft EIS.

The cost for this new alternative would be as follows:

Total Construction Cost	\$55,042,970
O&M Cost	245,370 per year
Average Annual Cost	5,638,490 per year

These costs can be compared with the costs for other alternatives, which are presented in Table 1-4, page 14 of the Draft EIS. When the costs are compared, it should be noted that the average annual cost for Mr. Klicker's new alternative is less than the average annual cost for Alternative 3, which is the proposed project. This comparison should be tempered, however, by the fact that Phase 2 (of Alternative 3) costs are only speculative at present. There will be a reevaluation of CSO control after the results of Phase 1 separation have been analyzed. Mr. Klicker's proposed Phase 2 approach could also be evaluated at that time.

Oral Comments

The following oral comments were received at the Draft EIS public hearing held in the City of Spokane on April 4, 1979. The comments are briefly summarized; for a complete version of the testimony see the hearing transcript attached at the back of this report.

Roger James

Mr. James indicated that the figures and discussions of user charges presented in the Draft EIS should be revised, as they are out of date and inappropriate. This comment was considered in preparing the response to the Spokane City Finance Department's letter in the preceding section of this chapter.

James Schasre

Mr. Schasre asked if the stormwater collected by new separate storm sewers would be treated prior to discharge to the Spokane River. Mr. Burd of EPA, Mr. James of Spokane City Utilities, and Mr. Arnquist of DOE all made oral responses at the time of the question. The general response was that there are currently no plans or requirements for treatment of stormwater discharges, and none is foreseen in the near future.

Robert Smith

Mr. Smith pointed out that water quality data in Tables 2-1 and B-10 of the Draft EIS were inconsistent. BOD and suspended solids numbers were in conflict. A check of the report text found that BOD and suspended solids numbers in Table 2-1 had been transposed. This transposition is acknowledged and corrected to read: BOD - 20-210 mg/l and Total Suspended Solids - 76-220 mg/l.

Mr. Smith also questioned whether data reported in Table B-10 as stormwater quality was not in fact CSO quality. A check of the data and its source verified that it was stormwater quality.

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TRANSCRIPTS OF PUBLIC HEARINGS
ON DRAFT EIS

BEFORE THE UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 10

A PUBLIC HEARING
ON
AVAILABILITY OF AN ENVIRONMENTAL IMPACT STATEMENT
COMBINED SEWER OVERFLOW ABATEMENT PROJECT
CITY OF SPOKANE, WASHINGTON

BEFORE
MICHELLE COYLE
HEARING OFFICER

2:30 P.M.

APRIL 4, 1979

COUNTY HEALTH DISTRICT OFFICES
ROOM 140, W. 1101 COLLEGE
SPOKANE, WASHINGTON

CAROL L. DEWEY
County Health Officer, Inc.
N. 5107 PULLEY
SPOKANE, WA 99201-19203
(509) 418 8467

I N D E X

<u>Speaker's Name</u>	<u>Title</u>	<u>Page</u>
Michelle Coyle	Hearing Officer	2 33
Robert Burd	Director of Water Division, EPA	8
Charles Hazel	Jones & Stokes Associates	10 25
Robert Guinnerman	Jones & Stokes Associates	12 23
Mike Rushton	Jones & Stokes Associates	18
Roger James	Director of Utilities, City of Spokane	27
James Schasre	President, Lake Spokane Environmental Association	34

CAROL L. DEWEY
County Health Officer, Inc.
N. 5107 PULLEY
SPOKANE, WASHINGTON 99203
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2:30 P.M., April 4, 1979

MS. COYLE: I would like to convene this hearing on Environmental Protection Agency's Draft Environmental Impact report or EIS for the City of Spokane Combined Sewer Overflow Abatement Project.

Let the record indicate that this meeting is taking place at 2:35 in the afternoon at the County Health District Office, Room 140, West 1101 College, Spokane.

I would like to welcome you all here. I appreciate your attending and taking your time to come and share your opinions with us. I realize that many of the issues which will be discussed this afternoon will be of direct concern to you.

My name is Michelle Coyle, and I am an attorney with the Office of Regional Counsel, Environmental Protection Agency, Region 10, Seattle. Mr. Donald P. Dubois, who is our Regional Administrator, has designated me as Hearing Officer for this hearing. As Hearing Officer, I would like to tell you the purpose of this hearing. We will maintain an agenda which will be orderly presentations by all of us here, and I would like to prescribe a few rules and procedural ground rules for the hearing.

To begin with, a public hearing is basically to allow local citizens to comment, in this case on a Draft

Environmental Impact Statement which has been prepared for EPA concerning the City of Spokane's Combined Sewer Overflow Abatement Project.

The EIS was prepared pursuant to what is known as NEPA, or the National Environmental Policy Act, of 1969, which, basically, required federal agencies to prepare statements on major federal actions significantly affecting the quality of the human environment. The federal action in this case will be an EPA grant to the City of Spokane, under the Federal Water Pollution Control Act Amendment of 1972, which would cover 75 percent eligible cost for design and actual construction of the project. EPA has previously awarded a grant to the City of Spokane for initial planning of this project. I understand that the proposed Step 3 Project has been placed on the State of Washington's fiscal year 1980 priority list. EPA only funds projects which are on this list. However, before any decision to award further grants to this project is made by EPA, the NEPA process must be completed. This process involves a review by EPA of comments received on the Draft Environmental Impact Statement, both at this hearing and through written submissions, preparation of a Final Environmental Impact Statement, and a 30-day public review period following publication of a final EIS.

The Draft Environmental Impact Statement which is the

1 subject of this hearing discusses environmental impact
2 of the proposed project, as well as the impact of
3 alternatives to the project, including the No-action
4 alternative. We are not going to try to limit the scope
5 of any inquiries you might have at this hearing too much,
6 but I would like to ask you and remind you that your
7 comments and statements should be in line with the purpose
8 of this hearing, which is to evaluate the environmental
9 impact of the proposed project and the various alternatives.

10 Those wishing to testify at this hearing have been
11 encouraged to review the Draft Environmental Impact
12 Statement, which has been on file at the City of Spokane
13 Library, which address is West 906 Main, and has been
14 located there at the library since about the middle of
15 February. Additional copies of the DEIS can be obtained
16 from Roger K. Mochnick, 201 Environmental Impact Statement
17 Coordinator, at EPA's Regional Headquarters located at
18 1200 Sixth Avenue in Seattle, Washington, 98101. Copies
19 of this document are available for review also at EPA's
20 Region 10 library, which is also located at Regional
21 Headquarters.

22 Persons who are unable to testify at this hearing,
23 either this afternoon or this evening, or who wish to
24 furnish comments after the hearing, are encouraged to do
25 so by writing Mr. Mochnick at the above-named address.

CAROL L. DEWEY
Court Reporter
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SPOKANE, WASH. 99208
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1 I would like to remind you that the deadline for
2 comments is April 19, 1979 and, for your information, the
3 additional copies of the EIS and the public notices for
4 this meeting are available from Ms. Michalene Ward, who
5 is seated at the table at the entrance to this room.

6 I would like to mention that there will be a definite
7 order for this hearing. All questions from the floor should
8 be reserved to the third stage of this hearing, this
9 afternoon. The discussion-and-question period will be
10 held after all interested parties have had an opportunity
11 to express their views.

12 This is roughly what the agenda will be: Part 1,
13 the introductory phase of this afternoon's presentation,
14 will include a brief statement from Mr. Robert Burd, who
15 is seated here in a blue coat and yellow shirt. Mr. Burd
16 is the Director of EPA's Water Division, and he will make
17 a statement concerning the Draft Environmental Impact
18 Statement process and procedures in arriving at an Impact
19 Statement.

20 Additionally, Mr. Charles Hazel, who is seated to
21 Mr. Burd's left at the far end of this table, who is a
22 member of Jones & Stokes, EPA's consulting firm for the
23 Environmental Impact Statement, will make a presentation
24 on the Draft Environmental Impact Statement.

25 Seated to my immediate left is Mr. Roger James of

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1 the City of Spokane, who will give a brief statement, as
2 well.

3 After the statements of these three individuals,
4 oral presentations will be made in the following order:
5 If there are any federal government representatives in the
6 audience who wish to make a statement, they will go first;
7 then state representatives, county representatives, city
8 representatives, and then individuals and citizen groups.
9 As of this moment, I do not have any requests for making a
10 statement from anyone other than those seated here at the
11 head table, so if you do wish to make a presentation, let
12 me know.

13 If anyone needs to leave early, please let Michalene
14 Ward, who is seated at the table by the entrance to this
15 room, know, so I can give you an opportunity to speak.

16 Following the presentation of the testimony, in Part
17 2 of the agenda, we will have a discussion-and-question
18 period. Questions may be asked of the panel sitting here
19 at the table, through me. The panel may have to ask their
20 various associates in the audience to answer the more
21 technical questions.

22 As Hearing Officer, I reserve the right to limit
23 discussion as such may be necessary. Since this is an
24 informal hearing, no cross-examination is really necessary
25 or appropriate. As already stated, please ask your

1 questions of the panel through me, and they will field
2 them or field the question to the proper person.
3 Presentations, since so few people have notified me that
4 they would like to make a presentation, could be as long
5 as 15 to 20 minutes. Written material should be left with
6 me following your presentation, if you have it, or sent
7 to Mr. Mochnick at the address I noted earlier. You are
8 under no obligation to submit written material, but a
9 written account helps us keep our records in order and
10 makes it easier for the individual making the transcript.
11 Written material must be submitted before the deadline of
12 April 19, and I believe the release of the Final
13 Environmental Impact Statement is scheduled for approxi-
14 mately six to eight weeks following the close of the
15 comment period.

16 A record is being made by the court reporter, Mr.
17 Carol Dewey, and, therefore, I ask that you clearly state
18 your name and address and affiliation, if any, before you
19 speak. I also ask that if anyone wants to make a state-
20 ment, that you please come forward, pick up this microphone
21 or speak clearly into the microphone, so that your comments
22 will be picked up.

23 Copies of the transcript of this hearing will be
24 available for your inspection at the main Spokane Library
25 where our Draft Environmental Impact Statement is, as well

1 as EPA's Seattle Regional Office.

2 Are there any questions about the procedure to be
3 followed?

4 Seeing none, let me introduce Mr. Burd, who will make
5 the first introductory comments.

6 MR. BURD: I would like to spend a few minutes
7 to review the rationale we went through at EPA in making
8 the decision to prepare an Environmental Impact Statement
9 on the City of Spokane's plan to control combined sewer
10 overflows, and, by the way, I hope everyone has picked up
11 the handout that is available. It does have a definition
12 of what combined overflows are, in case you are unfamiliar
13 with the term and the problems it may create.

14 Basically, we felt that an Environmental Impact
15 Statement on the City's facilities plan for the combined
16 sewer overflow project would provide a greater public
17 awareness of the issues that are involved with this
18 project, and also greater public participation in the
19 decision-making process as to what would be the best of
20 the alternate solutions in solving combined-sewer-overflow
21 problems.

22 We felt this particular project in Spokane was a
23 proper project.

24 There were a number of alternatives that needed to
25 be considered, quite a number of alternatives, which

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8

BURD

1 eventually were reduced to basically seven in the Draft
2 Environmental Impact Statement. We thought there were
3 significant economic issues involved with this project,
4 economic issues that the citizens of Spokane would be
5 very much interested in and would become, hopefully, more
6 familiar with through the preparation of an Environmental
7 Impact Statement.

8 We also felt that there were major environmental
9 issues to be dealt with here. There was the impact of
10 controlling, or not controlling, combined sewer overflows
11 on water quality in the Spokane River and Long Lake.
12 There were significant environmental issues dealing with
13 construction practices. If you were, for example, to
14 tear up streets and separate 220 miles of sewers, what
15 would be the impact on the citizens of that kind of
16 activity?

17 There also was, I think, an important potential
18 benefit here to certain parts of the City that experienced
19 drainage problems in the form of flooded basements. That
20 was an issue that we felt could use greater attention.
21 Then there was the significant environmental issue of
22 the relationship of this plan of controlling combined
23 sewer overflows to the concept of operating a regional
24 sewage treatment plant here, a regional sewage treatment
25 plant that could potentially serve the outlying areas of

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9

BURD

1 Spokane County. We thought all these issues were very
2 important, and some members of the public in the Spokane
3 area sought greater public involvement than had been,
4 they felt, available up to that time.

5 So, based on their interest, and, again, the signi-
6 ficant economic and environmental interests, EPA then made
7 the decision to prepare an Environmental Impact Statement,
8 and I think it has been a good process and has demonstrated
9 that the public is interested, and there has been greater
10 public participation than perhaps there was before.

11 I think the issues involved have been very well
12 highlighted. There were, prior to this date, two workshops
13 held as we were going through the development of the Draft
14 Environmental Impact Statement where members of the public
15 have had the opportunity to discuss with us and our
16 consultants the alternatives, such as cost, and other
17 factors related to the Impact Statement.

18 So that's the rationale behind the decision to do an
19 EIS, which has led to the hearing today, and, as the Hearing
20 Officer mentioned, there will be an opportunity for comment
21 after this, and up to the point of final EIS.

22 MS. COYLE: Mr. Hazel.

23 MR. HAZEL: My name is Charles Hazel. I
24 represent Jones & Stokes Associates, the prime contractor
25 for the preparation of the Environmental Impact Statement.

1 I would like to introduce two of my associates who
2 were principally involved in the preparation of the docu-
3 ment, Mike Rushton and Robert Gunnarman. They will be
4 making a short presentation of some of the key material in
5 the document, in the EIS, and will be available to answer
6 technical questions later on.

7 To add somewhat to the purpose and scope of the EIS
8 given by Mr. Burd, I would like to indicate that the
9 Draft Environmental Impact Statement is a composite of
10 information and data that was locally available gathered
11 from various agencies and individuals in the area and
12 sorted, analyzed and evaluated and interpreted to prepare
13 the EIS. State EPA regulations and other factors have,
14 naturally, affected some of these interpretations and use
15 of data.

16 The Draft EIS presents results and conclusions derived
17 from the data and discussions we have gathered together in
18 the workshops that were held and presented in a way which
19 we believe point out the key issues and key data available
20 relating to these issues, and, hopefully, present it in a
21 way which is understandable and organized, so persons can
22 use it so they understand the project.

23 With that, I wish to introduce again Mike Rushton,
24 who will make a short presentation of some of the materials
25 in the EIS, and he will be followed by Robert Gunnarman.

1 bob is first. I had it backwards.

2 MR. GUTERMAN: In the City's Facilities Plan,
3 there were three alternatives which were mentioned, and
4 these are on this slide, labeled as Alternatives 1, 2 and
5 3.

6 Since the City's Facilities Plan, there were two
7 plans which were formulated by private citizens. These
8 are called the Klicker and Latenser Plans, and an alterna-
9 tive which was developed in the course of the EIS process
10 is here labeled as the Combination concept, and, as required
11 by federal law, a No-action alternative. What we are going
12 to do now is go through a description of these one at a
13 time.

14 Alternative 1 is a concept that uses underground
15 storage basins to store the waste water flow and then
16 gradually put it back into the interceptor, and it is
17 conveyed to the treatment plants for subsequent treatment.

18 In the City's Facilities Plan, the underground
19 storage basins were sized so there would be one overflow
20 event on the average of every 25 years. A subsequent
21 analysis by the City and EPA and also as a portion of this
22 EIS process showed the most effective size for a storage
23 basin was such that there would be one overflow event
24 every year. So the EIS process looked at Alternative 1,
25 storage basin concept, using two different sizes. One

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1 would allow an overflow event every 25 years, and the
2 smaller size would allow an overflow event once every
3 year. The alternatives looked at storage basins located
4 at 14 different locations.

5 Another part of Alternative 1 and Alternative 2 is
6 relief sewers. We would have to look at the project
7 objectives, one of the project objectives being to
8 eliminate combined sewer overflow, stormwater overflow,
9 which the storage basins do, and the second is to solve
10 basement flooding and drainage problems, and this is
11 accomplished with relief sewers.

12 So Alternative 1 is storage basins plus relief sewers.

13 Alternative 2 has what is called satellite treatment
14 plants, and these are located at the same locations as the
15 underground storage basins, at 14 different locations.
16 The satellite treatment plants provide a low level of
17 treatment compared to what is provided by the City's
18 treatment plant, called priority treatment, and it is
19 mainly a process of sedimentation, with the addition of
20 chlorine.

21 As I stated, Alternative 2 also requires relief
22 sewers, about 55 miles of relief sewers, to solve basement
23 flooding and urban drainage problems.

24 Alternative 2, as it is presented in the EIS, is
25 identical to Alternative 2 in the City's Facilities Plan,

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1 and allow one overflow every 25 years.

2 Alternative 3 is construction of storm sewers. The
3 way the sewer system is set up now in the City of Spokane,
4 or a principal portion of it, and leads to the problem we
5 are facing now, the storm water and sanitary waste are
6 conveyed in one sewer. Alternative 3 would construct new
7 storm sewers to segregate these flows, and the existing
8 system would then be used to convey sanitary waste, and
9 the new system would convey storm water, which would then
10 go directly to the river.

11 There are 220 miles of storm sewers which would be
12 required, and like I said, these would convey storm water
13 directly to the river, and, depending upon the time of the
14 year and intensity of the storm, which is used to calculate
15 how much runoff there would be, there would be somewhere
16 between 80 and 110 days that storm water would be conveyed
17 to the river.

18 Alternative 3, which is called the Klicker Plan, is
19 really a sub-option of Alternative 1, which uses storage.
20 The Klicker Plan uses underground storage basins which are
21 sized to contain all flows which would occur once every
22 five years. When a storm producing a greater amount of
23 precipitation and runoff than this occurred, the storage
24 basins would overflow into open lagoons which would be
25 located adjacent to the storage basins, and these lagoons

1 would then contain any flow in excess of the five-year
2 storm event.

3 As in Alternative 1, the flows from storage basins
4 and open lagoons would then, following the cessation of
5 the storm, be put back into the interceptor and conveyed
6 to the treatment plant for treatment.

7 Another factor which differentiates the Klicker
8 Plan from Alternative 1 is a large storage lagoon located
9 between Bridge Street and the Spokane River, and this
10 storage basin would also have a portion which is closed
11 and underground and another portion which is open and at
12 ground level.

13 The Latenser Plan uses a combination of flow rerout-
14 ing and storage in a large open storage basin which is
15 across the river from the treatment plant, in Riverside
16 State Park. This open storage basin would contain all of
17 the flow during a storm which would normally be the CSO,
18 and then, when the storm passes, this flow would be
19 directed into the treatment plant. As differentiated from
20 all those alternatives, the treatment concept is different.
21 In the Latenser Plan, all the advanced waste water
22 treatment at the tertiary facility would be abandoned
23 and only secondary treatment would be provided. The
24 effluent from the secondary treatment plant would be
25 exported using a pipeline and a balancing reservoir to a

1 pump station in the Crab Creek drainage basin, and it
2 would flow down Crab Creek a distance and be collected
3 and utilized for agricultural irrigation.

4 The Combination Concept, which was developed as a
5 portion of the MTS process, tried to combine, solely on
6 a cost basis, initially the best features of storage and
7 storm sewers and dividing the 15 different drainage
8 basins within the City, it looked at each one of these
9 on a cost basis to determine whether storage basins or
10 storm sewers were more cost effective. The conclusion of
11 this was that in five areas storm sewers were the most
12 cost effective, and in 10 areas storage basins were the
13 most cost effective technique.

14 The No-action alternative, which is required to be
15 analyzed, would consist basically of doing nothing other
16 than treating wastewater as it comes down the interceptors
17 into the existing treatment facility. There would still be
18 CSO and still be a stormwater plant. The NPDES would
19 continue to be violated because of the existence of the
20 stormwater plant and existence of CSO and the objective
21 of the MTS to promote or to leave open the option for
22 regionalization would not be met.

23 Coming out of this analysis, which looked at cost
24 and also looked at environmental and cost to society or
25 social impact is the apparent best project alternative.

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1 The apparent best project alternative, or the proposed
2 project, is actually what's called a Phase I or division
3 of what was previously called Alternative 3, which is the
4 construction of storm sewers. The phases have been
5 divided into two, Phase I and Phase II, and here we see
6 what is a proposed project in the north and northwest
7 portions of the City.

8 The proposed action in Phase I eliminates approximately
9 85 percent of the overflow and only 15 percent of the
10 total storm sewer cost is expended in performing this,
11 and this is how Phase I was actually defined, as that
12 portion of Alternative 3 which was cost effective at the
13 present time.

14 This would involve the construction of about 90
15 miles of storm sewers in the construction period, which
16 would take between three and five years, and a detailed
17 schedule has not been formulated at this time.

18 Phase II, which isn't shown here, is construction
19 of storm sewers in the remainder of the City, and this
20 would solve the remaining 15 to 16 percent of the over-
21 flow and would require approximately 61 percent of the
22 remainder of the cost of Alternative 3.

23 Phase II is a necessary component of this alternative
24 to allow full compliance with the NPDES program and also
25 to keep open the option for use of the City's treatment

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1 plant for regionalization.

2 The project, in addition to being cost effective,
3 was divided into Phase I and Phase II because at the
4 present time there is insufficient federal and state
5 grant funding to carry out the entire Alternative 3,
6 whereas Phase I could be funded at the present time.

7 In a later part of this presentation, we will
8 discuss the probable cost-sharing of Phase I, but now
9 I would like to turn it over to Mike Kushon so he can
10 discuss various impacts of the project.

11 MR. RUSHFORD: Thank you, Bob.

12 I would like to run through, briefly, some of the
13 findings of the Environmental Impact Statements and in
14 terms of the impacts themselves, and in most cases these
15 are broken down into Phase I and Phase II impacts of
16 the proposed action, and I am dealing only with the
17 proposed action.

18 In terms of construction problems related to this
19 project, you see on the slide the area that would be
20 affected by Phase I. There would be approximately 90
21 miles of separate storm sewers constructed in this area
22 of the City over a three- to five-year period. This
23 would, obviously, lead to typical construction-type
24 problems of blocking of access, traffic disruptions,
25 noise and dust and safety hazards created in the

1 construction zones, and this sort of thing. In most
2 cases, any particular stretch of road would only be
3 affected for a two- or three-week period, but this whole
4 project would take three to five years to complete.

5 Phase II construction would cover the remaining
6 part of the City, the remaining mileage of the total
7 220 miles of separate sewer construction, and at this
8 time a time frame for that part of the project has not
9 been developed, but it would also take at least five
10 years to complete that construction, and you run into
11 the same sorts of construction-related impacts along
12 the pipeline route, traffic disruption, blocking of
13 access and so forth.

14 It is important to note that in Phase II construc-
15 tion the downtown core part of the City would be affected.
16 Phase I is mostly in the residential part of the City.

17 In terms of water quality implications, the City
18 presently is contributing pollutants to the Spokane
19 River from three different points.

20 You see here some bar graphs that estimate the
21 loadings of the nitrogen and phosphorous to the Spokane
22 River from the existing wastewater treatment plant
23 downstream from the City, the stormwater treatment plant
24 which is located at the same point, and then combined
25 sewer overflows that occur at numerous points within the

City.

The major parameters we are looking at here are nitrogen and phosphorous, mainly because those are the elements of the wastewater which pertain to the nitrification of the river.

This is another bar graph indicating the City's current loading to the river compared to measurements of nitrogen and phosphorous made at the head of Long Lake in the year 1978, and you can see here that approximately 2,030 tons of nitrogen passed into Long Lake in 1978, as measured at the point at the head of the lake.

The second bar indicates an approximation of what the City is contributing to the river in terms of CSO, stormwater plant discharge and advance wastewater treatment discharge.

Phase I construction will reduce the smaller increment here, the CSO increment, by approximately 84 percent in volume, and it will also reduce the stormwater inflow to the treatment plant by approximately one-quarter.

This results in approximately a three percent reduction in the City's nitrogen loads and a five percent reduction in the City's phosphorous loads to the river. I am talking about only the middle bar here. Phase I

construction will eliminate three to five percent of that middle bar.

Phase II, once it is completed, will eliminate all CSOs, all storm plant discharge, and another large increment of the stormwater that is currently going through the treatment plant. This reduces the City's total load of nitrogen and phosphorous, nitrogen about 22 percent and phosphorous about 21 percent. This large percentage removal is due not only to the removal of CSOs and storm plant discharges, but also is expected to improve removal efficiency at the existing wastewater treatment plant, due to the fact that flows through the plant will be on a much more even basis throughout the year rather than peaking every time there is a storm.

These removals still will probably not show a major increase in water clarity downstream from the City or a major decrease in the potential algae growth in the Long Lake area.

The public health implications of the proposed project. As stated earlier, Phase I controls overflows at both Maonach and Hollywood overflow points. Each of these triangles represents a current overflow. The size of the circle shows general annual relationships of the volume of discharge from those points. Phase I will control the two larger circles here, representing about

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1 84 percent of the annual volume of CSO to the river.
2 This will be a major reduction in bacterial and viral
3 contamination that reaches the river, benefiting, of
4 course, the use of the river throughout the year. However,
5 period CSO events will continue to occur from the other
6 25 overflow points that are not controlled by Phase I.

7 Phase II, when it is completed, would eliminate the
8 remainder of the smaller overflows in the City.

9 Finally, the influence of the project on the
10 regionalization potential of the treatment plant. If
11 stormwater flows through the wastewater treatment plant
12 are eliminated, the plant has a capacity of serving a
13 much larger area than the City of Spokane. The plant
14 has now an average dry weather flow capacity of about
15 40 million gallons a day, and the present dry weather
16 flows through that plant are approximately 28 million
17 gallons a day. However, on an annual basis, the plant
18 is now treating about 11 million gallons a day of storm-
19 water that is diverted through the combined sewer system
20 to the treatment plant.

21 So, by eliminating stormwater overflows to the
22 plant, there is a sizable increase in capacity at that
23 treatment plant.

24 Phase I will reduce the stormwater flows through
25 the plant by about 25 percent. That's in Phase I. Phase

1 II will free up an additional increment of interceptor
2 and treatment plant capacity for these other areas, and
3 once both phases are complete, this is when the region-
4 alization potential of the plant is really realized.

5 With stormwater plant clarifier conversion at the
6 treatment plant, these clarifiers are not treating storm-
7 water. It is diverted to secondary clarifiers and could
8 increase the plant's present average flow capacity from
9 40 million gallons to about 60 million gallons a day.
10 This is sufficient to accommodate projected flows out to
11 about the year 2030 from both the City, North Spokane
12 and most of the Spokane Valley. There is a potential
13 also that some expansion of phosphorous-removal capability
14 will have to go along with this modification of clarifiers
15 but that hasn't been developed to any great detail yet,
16 as to how extensive that would be.

17 I think I will turn it back to Bob to talk about
18 costs.

19 MR. GUMBERMAN: This chart shows the cost for
20 the apparent best project alternative, or the proposed
21 project, for Phase I, Phase II, and the total cost.

22 Phase I, the total construction cost is roughly
23 25 million dollars, and for Phase II, it is 30 million
24 dollars, to give a total construction cost of 55 million
25 dollars. That's if the project were constructed at the

1 present time.

2 Now, the allocation of the project costs between
3 EPA, the State of Washington, and the City are governed
4 by a very complex formula which allocates the cost for a
5 multi-purpose project, which this is, between pollution-
6 control features and drainage features.

7 Looking at the total cost of 64 million dollars
8 if it were constructed today and utilizing this formula,
9 the project as we have calculated it is 85.7 percent
10 eligible for state and federal funding.

11 When it is divided into Phase I and Phase II, the
12 funding for Phase I is 100 percent eligible for federal
13 funding. 100 percent eligible, when it is translated,
14 means that 75 percent of the cost is paid by the federal
15 government, 15 percent by the state and 24 percent by the
16 City, as is shown in this chart.

17 At the present time, the funding for Phase II cannot
18 be determined, since there is no money allocated by the
19 state and federal governments at the present time for
20 funding from years subsequent to about 1931, and Phase
21 II would be constructed somewhat after 1981.

22 The translation of the City's share of the
23 construction and the operation and maintenance of this
24 project is shown at the bottom here, and it could be
25 done either of two ways, or a combination of these two

1 ways.

2 The first way that is shown is to increase the
3 users' charges per connection, and I would like to point
4 out that this estimate of \$6.73 per month is based on
5 total connections in the City, and it is not based on
6 industry absorbing more than the cost of, say, one
7 connection. So when it is actually allocated through
8 according to federal regulations, it is somewhat less
9 per household connection.

10 The second way to do it is a tax rate increase, an
11 ad valorem taxation method, and if the entire City's
12 share of construction O and M were carried this way,
13 the tax rate increase would be \$.21 per thousand dollars
14 of assessed valuation.

15 Like I said, there may be some combination of these
16 two funding methods which could be utilized.

17 I will turn the presentation back now to Charlie
18 Hazel.

19 MR. HAZEL: One thing that should be corrected
20 on the chart is that the \$6.73 per month is \$6.73 per
21 year, not per month.

22 MR. GUERINIAN: No, that's per month.

23 MR. HAZEL: That should lead to a good question,
24 whether it is \$6.73 a month or \$6.73 a year.

25 To summarize our conclusions, the impact from the

1 proposed Phase I project, the construction impacts are
2 localized to the area previously shown on the map and in
3 the handset. The CSO, Combined Sewer Overflows, will
4 continue to discharge from 25 locations along the river,
5 and, therefore, Phase I of the project will only partly
6 abate the pollutants going into the river.

7 About 16 percent of the original volume of CS
8 overflow would still enter the river. Sewer backup and
9 street flooding within the City would be corrected within
10 approximately one-third of the City area. Flows to the
11 advanced wastewater treatment plant will be reduced by
12 595 million gallons per year, and in doing this, there
13 would be some conservation of chemicals and energy, and,
14 therefore, cost of operation to the plant, based on those
15 flows. Flow reduction will be insufficient to fully
16 encompass regionalization if this is presented as a
17 regionalization option.

18 The amount of nutrients removed will probably have
19 no measurable effect on the algae problems reported in
20 the downstream area, but control of about 84 percent of
21 the combined sewer overflow should significantly reduce
22 the risk to public health for the pathogens that enter
23 the river.

24 With that, that completes our presentation.

25 MR. GUTENBERG: It is per year.

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HANSEL

1 MR. HANSEL: It is per year.

2 MS. COYLE: For the record, that is \$6.73 per
3 year.

4 MR. GUTENBERG: Per connection.

5 MS. COYLE: Mr. James.

6 MR. JAMES: Roger James, the Director of
7 Utilities with the City of Spokane, and I would say a
8 couple things before I start.

9 Number one, it is a real pleasure for me to be here
10 today to represent the City and to participate in this
11 very important meeting, and, secondly, I would also say
12 that the assignment which you have given me to present
13 at the meeting today has pretty well been covered by the
14 last two speakers, so I think I will vary a little bit from
15 my original assignment and talk a little bit, briefly and
16 rather quickly, about some of the historical points in
17 the development of this system and some of the things
18 that are perhaps not too well known to many of the
19 people in the audience today. I will try to run through
20 these quite rapidly.

21 It might be of interest to know that the first
22 sewers in the City of Spokane were constructed and
23 placed into operation in 1890. They were in the area
24 just west of the downtown business district. The sewer
25 system in the downtown area was built during the 1930's.

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1 sewer construction has continued rather evenly throughout
2 all of the years since that time, and up until about 1940,
3 about the beginning of World War II, all sewers
4 constructed within the City were combined sewers, meaning
5 that they not only carried away sanitary sewage from
6 houses, commercial, industrial, institutions, but also
7 carried stormwater from catch basins and roof drains
8 and this type of thing. All of them, with the exception
9 of some of the very few first built, were of the combined
10 sewer variety.

11 The City of Spokane has a long history of interest
12 in sewage treatment, and I think maybe some people are
13 not aware of that. It might be interesting to know that
14 the City began seriously considering building sewage
15 treatment in 1913. The City developed a number of
16 programs for providing sewage treatment over the years
17 with the help of their consulting engineer, a firm which
18 was at that time located in Chicago, Illinois.

19 On four occasions before World War II, we presented
20 comprehensive plans to the voters of the City of Spokane
21 for sewage treatment facilities for the City, and I might
22 say we were rather horrendously defeated at the polls in
23 every attempt to do this, but some very concentrated
24 efforts were made to do it.

25 Finally, in 1946, the fifth presentation was made,

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1 and at that time the bond issue was successful and
2 money was made available to start the process of sewage
3 treatment.

4 The construction of intercepting sewers along the
5 river was commenced in 1947. The original sewage treat-
6 ment plant was built and placed in operation in 1958.
7 It was significantly enlarged and upgraded in 1962. The
8 City, in the interim period, had built seven, what we
9 call satellite treatment plants, to treat areas of the
10 City which are not tributary to the main sewer system,
11 and still operates these seven plants, the idea being
12 that eventually they will be tied into the sewer system,
13 but at the present time it is more economical to keep
14 them completely separate from the existing system.

15 The efforts to rebuild a sewage treatment plant and
16 enlarge it and upgrade it were started in 1967. The
17 actual design work began in 1972. Construction of the
18 sewage treatment plant was commenced in 1975 and went on
19 line in 1977. It is a very modern plant. We are very
20 proud of the job that it does. We are meeting the
21 standards in our NPDES permit, and have consistently met
22 the standards, with the new treatment plant. We think
23 it is a real model, and we think it is an excellently-
24 operated plant.

25 The City was under orders from the state and the

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1 federal government to do something about this combined-
2 sewer overflow problem and pursue it to that objective.
3 They did apply for a Step 1 grant to do the original
4 planning for this project. The planning was done with
5 engineers from our own Public Works Department and the
6 Facility Plan was prepared by them.

7 A great many different ideas were considered
8 in solving this problem, and the three listed first on
9 the showing there a few minutes ago were the three which
10 we decided were worthy of some additional study; that is,
11 the storage basin concept plan, one involving statisti-
12 cally one overflow each 25 years. These were very large
13 basins to be constructed at various points along the
14 Spokane River. They are an expensive operation, because,
15 or course, as you realize, they have to be very large, in
16 the first place. Then, in the second place, they have to
17 be equipped with extremely large pumps because when they
18 fill up they have to be pumped back into the system, ready
19 for the next rain. You really have to get that material
20 out of there in a hurry, and because they are in the
21 congested areas of the City and because of the possible
22 concern and nuisance arising from them, some very
23 elaborate plans have to be included to clean them and put
24 them in shape so they will not be a nuisance.

25 We investigated, secondly, what they have referred

1 to as satellite-treatment-plant concept where we would
2 build small, automatic plants at these various outlets
3 and they would go on line whenever material started to
4 overflow and run only during the overflow period.

5 And, finally, this process of sewer separation,
6 in which we made what is essentially a brand-new sewer
7 system over the entire City, disconnected the catch
8 basins and roof drains from the existing sewer, and
9 tied them into the new one, and used the existing sewer
10 exclusively for sanitary sewers.

11 The cost of these has been mentioned before. Our
12 figures were about 64 million dollars for the sewer-
13 separation concept, which was by far the most inexpensive
14 and most cost effective of the three plans we investigated.

15 The part which has been designed as Phase I, which
16 included something better than a-third of the City toward
17 the north end, we estimated it would cost about 24
18 million. These figures were based on the concept of
19 taking enough stormwater out of the system so the system
20 would not overflow.

21 However, we did come up with the cost of another
22 eight million dollars which would be necessary were it
23 necessary that we actually remove all of the stormwater
24 from the sewers, and not just enough to keep them from
25 overflowing. We estimated another eight million dollars

1 would be required to accomplish that purpose, and this
2 was the plan that we went to the State of Washington
3 with.

4 I would comment just briefly on the matter of costs.
5 We have been reviewing the Environmental Impact
6 Statement, and, frankly -- and I don't mean to say this
7 in a derogatory manner, but, frankly, we feel the entire
8 chapter relating to costs and charges for services should
9 really be redone because the figures are out-of-date and
10 because we think they are based on assumptions which are
11 simply not in accordance with Washington State law and
12 would not be possible. So we will be filing a statement
13 later on in that, attempting to point out why we believe
14 these things to be true.

15 The City is anxious to proceed with this project
16 and to get it underway as best we can. Our figures
17 indicate that the dry-weather flow runs about 28 million
18 gallons per day. We can provide the complete advanced
19 wastewater treatment to sewage at the rate of about 77
20 million gallons a day. We can treat all of the sewage
21 which gets into the interceptor, somewhere around a rate
22 of 125 million gallons a day, either at the present time,
23 we can treat the 77 million with the complete advanced
24 wastewater treatment, and the balance of the 125 million,
25 about 48 million, would receive primary treatment and

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1 disinfection. The project, we think, has been rather
2 carefully worked out. We are prepared to move ahead
3 with it as soon as the necessary steps of the EIS and
4 the financing can be worked out. We are very happy to
5 have the people in the EPA and the others here today
6 to talk to the citizens of Spokane regarding this
7 project. We think it is a good project, and we hope we
8 can get underway rather shortly.

9 Thank you very much.

10 MS. COYLE: Now, hopefully, going into part
11 two of our agenda, there are several federal employees
12 in the audience this afternoon, but I understand they
13 are not prepared to make any comments at this point, but
14 would be willing to answer questions. Some of these
15 individuals are Deborah Kirk, who is Project Officer on
16 the Environmental Impact Statement, Mr. Ken Hanson, who
17 is the Project Engineer with respect to this project.

18 In the event we have questions and they are the
19 individuals who are best qualified to answer, they would
20 be willing to do so.

21 We also have several representatives from the State,
22 two individuals from the State who, again, would be
23 willing to field questions if they arise, Mr. John
24 Arnquist and Mr. Claude Sappington.

25 There may be other representatives here. I am not

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1 aware of anyone here being from the County. Mr. Dobratz,
2 if any questions arise you might be able to handle, I
3 hope you will be willing to help us out.

4 Aside from Mr. James, I believe Mr. Yako has left
5 the room.

6 MR. JAMES: Mr. Blagen is in the back row
7 there.

8 MS. COYLE: Mr. Blagen may be able to answer
9 questions.

10 Are there any questions at this point from individuals
11 in the audience? I haven't received any cards suggesting
12 that there might be.

13 Sir?

14 MR. SCHASLE: Gentlemen, my name is James
15 Schasle. I am here as President of Lake Spokane
16 Environmental Association.

17 We are interested in this EIS report in a lot of
18 respects. One particular facet of it that we are
19 vitally interested in is what kind of treatment, if any,
20 is contemplated for the storm sewer overflow before it is
21 dumped into the river? In other words, is it going to be
22 collected directly from the various basins, together with
23 all the debris normally found on the street and the salt
24 from the winter and so on and so forth, dumped directly
25 into the river, or is it going to be treated in some

1 fashion? If it is going to be treated, we would like to
2 know what the cost of that would be, or if study has been
3 given as to what the cost of that treatment might be.

4 MS. COYLE: Mr. Burd?

5 MR. BURD: Mr. James may be able to answer
6 better than I am, but the project doesn't, as far as I
7 know, contemplate treatment of stormwater that is
8 separated from the combined sewer and discharged
9 separately.

10 I think it should be pointed out that there is
11 considerable difference in the characteristics, the
12 quality of the combined sewer overflow that is presently
13 discharged into the river and the characteristics of
14 the separated stormwater. Combined sewer overflow has
15 a much greater pollution load, in terms of organic
16 solids, in terms of bacteria. Stormwater has a much
17 lower contribution of those pollutants that I think we
18 are most concerned about in the Spokane River and Long
19 Lake. Certainly, there are some, as you indicate, the
20 stormwater washing off of streets, parking lots, does
21 carry along with it the debris and dirt and other things,
22 oil from automobiles, that are on the streets and parking
23 lots; but, again, the pollution load from that source is
24 considerably less than that from combined sewer overflow,
25 and hopefully there will be programs in the City and

1 County that perhaps will more efficiently remove some
2 of the debris from the streets and parking lots so even
3 less of that material would be carried along in the
4 stormwater.

5 MS. COYLE: Mr. James, do you have anything to
6 add?

7 MR. JAMES: I guess I would kind of echo some
8 of the things Mr. Bard had said.

9 There is no contemplation at this time of a
10 treatment for the separated stormwater. It is our
11 considered opinion that if treatment of stormwater becomes
12 a necessity, that the type of treatment which would have
13 to be provided for the stormwater would be considerably
14 different from the type of treatment which is provided for
15 sanitary, domestic sewage, and, therefore, it is our
16 feeling and our judgment that, if we are required at some
17 time to treat the stormwater, that it would be necessary
18 to separate it before it could be treated, and so we feel
19 that, even if this is a future outlook, that this is a
20 step in the right direction, and a step which, in our
21 opinion, would be necessary in order to accomplish that
22 kind of treatment. This is our feeling.

23 We did some studies in connection with our Facilities
24 Plan, and undoubtedly will do more on the possible effects
25 of discharging the stormwater directly to the river, and

1 at least as a result of the studies that we did, we
2 came to the conclusion -- and I believe that the EPA
3 and the DOE at that time concurred in this decision --
4 that treatment under the present guidelines was not
5 considered to be necessary.

6 Thank you.

7 MS. COYLE: Any other questions anyone might
8 have?

9 MR. SCHASKE: I believe the DOE has conducted
10 some studies along the lines of the question I just asked.
11 I would like to hear what the DOE has concluded in that
12 regard, for the record.

13 MR. ARQUIST: My name is John Arquist, and I
14 am with the Department of Ecology here in Spokane, and
15 basically the answers that Don and Roger gave about
16 stormwater treatment are shared by the Department of
17 Ecology. At this time, we have no requirement for the
18 City to treat separated stormwater, nor do we foresee
19 any in the immediate future.

20 MS. COYLE: Thank you, Mr. Arquist.

21 Any other questions from the audience?

22 MR. JAMES: I would like to mention, Madam
23 Chairman, that the City, as of this moment, does not
24 have a consulting engineer on the storm separation
25 project. The City is engaged in the process of making

1 the selection. The engineering firm which designed the
2 sewage treatment plant, and which, in all probability,
3 will work with us on the separation project, is repre-
4 sented here in the audience by Mr. Bob Smith, and I
5 think I would at least like to have people know who he
6 is, if they don't know who he is. He is here, if anyone
7 wishes to talk to him, Mr. Bob Smith from Bovay Engineers
8 here in Spokane, Washington.

9 MS. COYLE: If there are no questions --

10 Mr. Smith?

11 MR. SMITH: I have one question. Several
12 places in the report, we talked about the increased
13 suspended solid load by storm sewer separation, and I
14 think there is a conflict in two of the tables you have,
15 Table 2-1 and Table B-10, and somehow I couldn't always
16 come up with the same numbers.

17 In other words, on Table 2-1, you have got Total
18 Suspended Solids, 20 to 210, and on Table B-10, you have
19 76 to 220. Looks like Suspended Solids BOD have been
20 inadvertently flip-flopped, and I'm wondering which
21 numbers have been used.

22 Perhaps Mr. Rushton could answer.

23 MR. RUSHTON: Table 2-1?

24 MR. SMITH: And B-10.

25 MR. GUTERMAN: I don't think we can answer that

1 at the present time.

2 MR. SMITH: I don't doubt there might be an
3 increase of some sort in mineral matter and that type
4 of thing. I am wondering, I guess, if that was
5 clarified.

6 I also wanted to know, you have got a footnote of
7 number six that the treatment plant provided some data
8 on stormwater runoff. I am wondering if that shouldn't
9 be clarified, to make sure that was stormwater runoff
10 and not combined sewer overflow.

11 MR. GUTERMAN: We will clarify that.

12 MR. SMITH: I don't know where they would have
13 gotten a sample of purely stormwater runoff to make up
14 an analysis.

15 MR. GUTERMAN: That was information furnished
16 by the City, and it was indicated it was for stormwater
17 runoff.

18 MR. JAMES: I think, Mr. Smith, Mr. Blagen
19 can help you with that question because he is familiar
20 with what you are talking about. He will talk to you
21 afterward, or now, or whenever you want him to.

22 MR. BLAGEN: I would like to say one comment
23 now. We did take a few samples of stormwater runoff.

24 MS. COYLE: Any other questions or comments
25 by any other representatives here?

1 I might have one question of Mr. Burd.

2 If I were a citizen of the City of Spokane, I would
3 probably be very concerned about the economic alterna-
4 tives, the economics of the alternatives proposed, and
5 I believe we were discussing this earlier, that the
6 proposed option is the second most cost effective, not
7 the most cost effective.

8 What rationale could you give me for justifying
9 that selection?

10 MR. BURD: EPA regulations and the law gener-
11 ally require the selection of the least-cost alternative
12 unless there are other factors, particularly environmen-
13 tal factors, that would justify going through a somewhat
14 more expensive alternative.

15 In the case here, the proposed recommended alterna-
16 tive is the second least costly, but we feel it has some
17 environmental advantages over the strictly least-costly
18 alternative, plus it has the advantage of allowing
19 regionalization of sewage facility in the area so that
20 additional sewage from Spokane County could be received
21 by the City sewage treatment plant.

22 That, in itself, by the way, could certainly lead,
23 and probably would lead, to additional environmental
24 advantage, to have the regional, rather than multiple,
25 treatment plants around the County. This is a case where

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410

1 there are some definite environmental advantages, and
2 the institutional advantage of regional sewage treatment
3 plants that overrides the least-costly alternative, and
4 I think would justify the second-least-costly alternative.

5 MS. COZIE: Any other questions?

6 If not, for the record, I would like to give to our
7 reporter a copy of the Notice of this public hearing,
8 and Affidavit of Publication, which I would give to you
9 after the meeting is closed.

10 If there are no further questions or comments, then
11 this meeting is adjourned at 3:40.

12 Thank you for coming. I appreciate it.

13
14 (Hearing is concluded.)
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003871

Notice of Public Hearing
on and Availability of
An Environmental Impact Statement
for the Combined Sewer Overflow Abatement Project
for the City of Spokane, Washington

Notice is hereby given of public hearings to be held by the Environmental Protection Agency, Region 10 (EPA) on the City of Spokane's application to EPA for grant assistance in the abatement of combined sewer overflows. The hearings will be held on April 4, 1979, at 2:30 p.m. in the County Health District Offices, Room 140, W. 1101 College, and at 7:30 p.m. at the Shadle Park High School Auditorium, R. 4327 Ash.

The purpose of this hearing is to allow all interested parties an opportunity to express their views and furnish specific data on matters pertinent to the proposed action. Detailed information on the project is found in EPA's Draft Environmental Impact Statement. This document is found in EPA's public inspection at the City of Spokane Library, W. 900 Main. Copies of the Draft Environmental Impact Statement can be obtained by request from EPA, 1200 Sixth Avenue, Seattle, WA 98101, ATtn: HS 443.

Public participation is encouraged by EPA. Exhibits, written statements, and other documentary evidence relating to the environmental impact of the proposed action can be submitted prior to the hearing. Anyone who has additional comments after attending the hearing may submit comments, exhibits, and evidence by April 19, 1979. Comments should be sent to EPA, 1200 Sixth Avenue, Seattle, WA 98101, ATTN: MS 443.

Affidavit of Publication

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003872

1 BEFORE THE UNITED STATES
2 ENVIRONMENTAL PROTECTION AGENCY
3 REGION 10

4
5 A PUBLIC HEARING
6 AVAILABILITY OF AN ENVIRONMENTAL IMPACT STATEMENT
7 COMBINED SEWER OVERFLOW ABATEMENT PROJECT
8 CITY OF SPOKANE, WASHINGTON

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11 BEFORE
12 MICHELLE COYLE
13 HEARING OFFICER

14
15
16
17
18 7:30 P.M.
19 APRIL 4, 1979
20 SHADLE PARK HIGH SCHOOL AUDITORIUM
21 NORTH 4327 ASH
22 SPOKANE, WASHINGTON
23
24
25

CAROL L. DEWEY
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534 1/2 PINE ST.
SPOKANE, WASHINGTON 99203
(509) 449-4367

1 7:30 P.M., April 4, 1979

2
3 MS. COYLE: Let the record indicate that it
4 is now 8:00 p.m., and we are here at the Shadle Park
5 High School Auditorium, North 4327 Ash, in Spokane;
6 that we have been present since 7:30, the time that was
7 officially designated as the commencement of this meeting.

8 No private citizens are present, and I would like to
9 open the floor under these circumstances to any questions
10 from the various representatives and governmental officials
11 who are present.

12 Are there any questions or comments on the part of
13 any persons present?

14 I only see one individual who wasn't here this
15 afternoon. Do you have any questions?

16 In that case, I would like to close the meeting --
17 It is about 8:03 -- and recommend that those individuals
18 who did not make use of this evening's meeting still have
19 until April 19, 1979 to submit their written comments to
20 EPA, Roger Hochmick, care of the EPA Regional Office,
21 Region 10, Seattle, Washington, 98101.
22

23 (Hearing is concluded.)
24
25

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3

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Notary Public in and for the State of Washington,
residing at Spokane, Wash.

Subscribed and sworn to before me at the City of Spokane, this
14th day of March, 1979.
That said NEWSPAPER was published in the regular and entire issue
of every number of the paper during the period of time of publica-
tion, and that the notice was published in the newspaper proper and
not in a supplement.
to the _____ day of _____
from the 14th day of March, A.D. 1979.
publication having been made once each _____ time.
was published in said newspaper _____ times, the
notice attached hereto and which is a part of the proof of publication,
order has not been revoked and is in full force and effect; that the
legal newspaper by order of the Superior Court of the State of Wash-
ington; that said newspaper was approved and designated as a
legal newspaper at its place of publication in the City of Spokane,
to the 20th day of July, 1941; that said newspaper is printed in an of-
ficial publication continuously for more than six (6) months prior
to the date of publication and regularly published and has had said
City of Spokane, Spokane County, Washington; that said newspaper
(Week) in the English language, in and of general circulation in the
regularly published, once each _____ day.
Principal Clerk of the Spokane-Spokane-Daily Chronicle
do solemnly swear that I am the
CHRISTINE CROSBY
County of Spokane,
STATE OF WASHINGTON

NOTICE OF PUBLIC HEARING
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Affidavit of Publication

CAROL L DEWEY

3

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10001 Highway 100
S. Chatham
Salem, NH 03075-1144 (910)
(100) 440 0101

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Affidavit of Publication

STATE OF WASHINGTON)
County of Spokane,

CHRISTINE CROSBY

I, CHRISTINE CROSBY, do solemnly swear that I am the Principal Clerk of the Spokane-Review-Daily Chronicle a newspaper established and

regularly published, once each day (Week) (Day) in the English language, in and of general circulation in the City of Spokane, Spokane County, Washington; that said newspaper has been so established and regularly published and has had said general circulation continuously for more than six (6) months prior to the 23rd day of July, 1979; that said newspaper is printed in an office maintained at its place of publication in the City of Spokane, Washington; that said newspaper was approved and designated as a legal newspaper by order of the Superior Court of the State of Washington for Spokane County on the 23rd day of July, 1979, and that said order has not been revoked and is in full force and effect; that the notice attached hereto and which is a part of the proof of publication was published in said newspaper 1 times, the publication having been made once each time from the 14th day of March, A. D. 1979, to the 14th day of March, A. D. 1979. That said notice was published in the regular and entire issue of every number of the paper during the period of time of publication, and that the notice was published in the newspaper proper and not in a supplement.

Subscribed and sworn to before me at the City of Spokane, this 14th day of March, 1979.

Notary Public in and for the State of Washington,
residing at Spokane, Wash.

Page 6-16

Notice of Public Hearing on and Availability of An Environmental Impact Statement for the Combined Sewer Overflow Abatement Project for the City of Spokane, Washington

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U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION X

1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101



REPLY TO
ATTN OF: M/S 443

JUL 31 1979

To: All Interested Governmental Agencies, Public Groups and Citizens

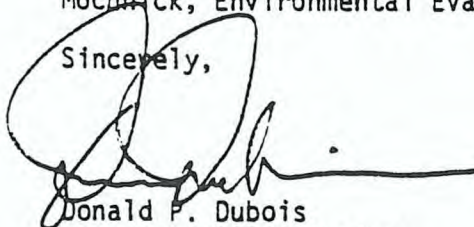
In compliance with Section 102(2)(c) of the National Environmental Policy Act of 1969, the Environmental Protection Agency has prepared a Final Environmental Impact Statement (EIS) entitled "City of Spokane Combined Sewer Overflow Abatement Project." The Final EIS is enclosed for your review and any comments you may have.

After a careful review of all comments received on the Draft EIS and an evaluation of the environmental impacts associated with each of the alternatives considered, EPA recommends the implementation of Alternative 3, separation of storm and sanitary waste flows. EPA has determined that this alternative will provide a cost effective and environmentally sound approach to the project.

Comments on this Final EIS and on EPA's recommendation are welcome. At the close of the 30-day review period, September 10, 1979, a final decision will be made concerning the award of construction grant funds to the City of Spokane for implementation of the recommended project.

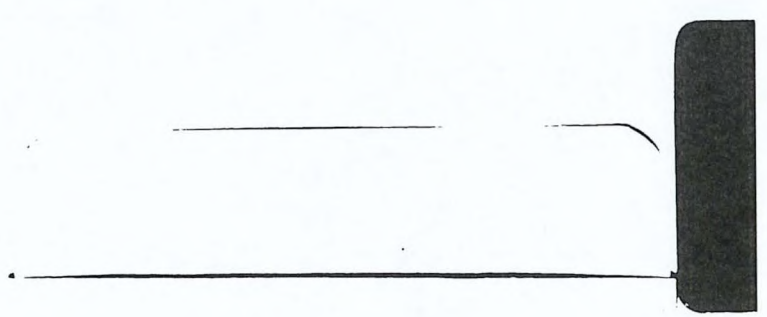
Please send any comments you may have or requests for additional copies of the EIS to EPA at the above address, attention: Roger K. Mochnick, Environmental Evaluation Branch, M/S 443.

Sincerely,



Donald P. Dubois
Regional Administrator

Attachment



T 8/13/2012
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HF GROUP -IN



